THE QUARTERLY REVIEW & PRODUCT GUIDE FOR THE COMMODORE 64 COMPUTER

## REVIEWS:

**KOALA PAD** MICRON EYE CAMERA **ELEXIDRAW ULTRABASIC-64** 

FACE TO FACE:

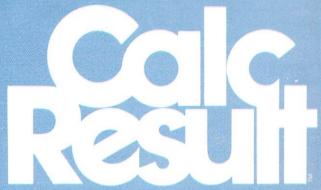
HOME ACCOUNTANT VS.

COMPLETE PERSONA ACCOUNTANT

TYPE-&-LEARN:

"CRASH": A 1/2-PAGE GAME WITH SOUND & GRAPHICS





# The Commodore 64<sup>™</sup> Spreadsheet that miles ahead

CALC RESULT.. The one spreadsheet guaranteed to turn your Commodore into a powerful financial tool. Offering you every feature found on other more expensive programs for much less the cost. Flexible...you can view four different areas at once

Versatile...customize your own print formats Distinctive...display beautiful color graphics CALC RESULT Advanced is a three-dimensional spreadsheet with built-in HELP function and 32 pages of memory. For the Commodore 64 \$149.95. For the CBM™ 8032 \$199.00. For first time users CALC RESULT Easy gives you a fast way to perform financial calculations—easily. For the Commodore 64 \$79.95. For a down to earth demonstration of either version visit your

Developed by: nandic software ab a company in the Datatronic group-

Distributed by:

DES-DATA EQUIPMENT SUPPLY 213-923-9361

SOFTEAM 800-421-0814

COMPUTER MARKETING SERVICES, INC. 800-222-0585 Commodore 64 is a trademark of Commodore Business Machines

WAREHOUSE 1, INC. EASTERN U.S./800-253-5330 WESTERN U.S.-800-255-0056 **BLUE SKY SOFTWARE** Ashland Office Center **Evesham & Alpha Avenues** Voorhees, NJ 08043 609/795-4025

A Product of:

Circle No. 157

local dealer today.

PUBLISHER/EDITOR BENN DUNNINGTON

ASSISTANT EDITOR CEL DUNNINGTON

PRINTED BY GRANGE PRINTING

WHOLESALE ORDERS & ADVERTISERS ONLY: WRITE:

INF0-64 30023 118TH AVE SE AUBURN WA 98002 OR PHONE (206) 939-0582

PUBLISHED QUARTERLY

## SUBSCRIPTIONS <u>ARE NOT</u> AVAILABLE

LETTERS. ARTICLES FOR CONSIDERATION AND OTHER CORRESPONDANCE SHOULD BE DIRECTED TO:

INFO-64 P.O. BOX 958 AUBURN WA 98071

ALL MATERIALS SUBMITTED BECOME THE SOLE PROPERTY OF INFO-64.

WE WELCOME YOUR COMMENTS AND SUGGESTIONS. WE WILL PUBLISH LETTERS WE FEEL ARE OF GENERAL INTEREST AND IN GOOD TASTE.

DUE TO OUR SMALL STAFF, WE CAN NOT ANSWER READERS' CALLS. ALL LETTERS WILL BE READ, BUT WILL NOT NECESSARILY BE ANSWERED.

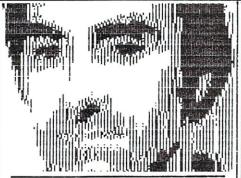
COPYRIGHT 1983 BY CYBERTECH. ALL RIGHTS RESERVED.

PET, CBM, VIC-20, AND COMMODORE 64 ARE TRADEMARKS OF COMMODORE BUSINESS MACHINES

#### ABOUT THE COVER

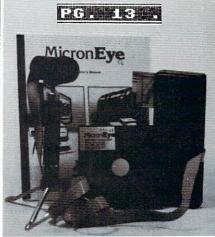
THIS MONTH'S COVER WAS PRODUCED WITH THE KOALA PAD AND KOALA PAINTER SOFTWARE FROM KOALA TECHNOLOGIES (SEE REVIEW THIS ISSUE). IT IS PHOTOGRAPHED DIRECTLY FROM A 1701 MONITOR AND UNRETOUCHED.

OUR BANNER WAS DESIGNED WITH SORCERER'S APPRENTICE (EVENT HORIZON SOFTWARE) AND OUR PREMIERE ISSUE'S COVER WAS ALSO CREATED WITH SORCERER'S APPRENTICE.



THE EDITOR. AS SEEN BY THE MICRON EYE CAMERA.

"NOW I KNOW HOW IT FEELS TO BE DIGITIZED!"



6 18 GAMES- 12 IN COLOR!!!

DECOMPOSITE OF THE PARTY OF THE

12 WHAT'S SHAKIN'

DIDUBLE TAKE 14 COLOR 80

CALLETS 13 MICRON EYE

14 BOOKS

by Sharon Z. Aker

15 FLEXIDRAW

16 ULTRABASIC-64 by Sharon Z. Aker

5 KOALA PAD

FARE TO FACE 18 HOME ACCOUNTANT VS.

C.P.A.

FIDER PROPERTY 22 "CRASH"

by Hans Grage

PRODUCT ROUNDUR

24 1000 PRODUCTS FOR THE 64

US:100:2 :000:100: 59 450 VENDORS

## 00P\$!

WE LEFT OUT THE PHONE # FOR WEBBER SOFTWARE (DISTRIBUTORS OF FLEXFILE 2.1). THE PHONE IS 215 687 5607.

"KMMM PASCAL" (PAGE 33) HAD THE WRONG CODE (& FROM THE CALLS WE GOT, THERE IS QUITE A BIT OF INTEREST IN PASCAL FOR THE 64). THE CORRECT CODE IS CGR NOT MCT- CONTACT: CGRS MICROTECH PO BOX 102 LANGHORNE PA 19047 (215) 757 0284.

"INTERPOD" IS AVAILABLE FROM LIMBIC SYSTEMS (LIM) IN PALO ALTO CA (415) 964 8788. 

FABTRONICS' 'UTILITY FILE' DOES NOT, AS REPORTED, REQUIRE DAILY INPUT FROM USER.  TO MY KNOWLEDGE, INFO-64 IS THE ONLY NATIONAL PUBLICATION WHICH IS ENTIRELY PRODUCED WITH THE PRODUCTS ABOUT WHICH IT WRITES. ALL OUR COMPOSITION, ARTWORK, ACCOUNTING, FILING, MAILING, WORDPROCESSING....EVERYTHING- IS PRODUCED WITH PRODUCTS LISTED BETWEEN THESE COVERS, AND WHICH ANYONE MAY PURCHASE FOR A MODEST INVESTMENT. WE SAY THIS TO LET YOU KNOW 2 THINGS: 1) WE ARE STAYING VERY CLOSE TO OUR SUBJECT MATTER. 2) WITH YOUR COMMODORE 64, THE RIGHT ADDITIONAL PRODUCTS, & A LITTLE INGENUITY, YOU CAN TACKLE SOME PRETTY LARGE JOBS- YOUR IMAGINATION IS THE ONLY REAL LIMITING FACTOR.

> BENN DUNNINGTON -EDITOR



# **WE'LL BACK YOU UP!**

"The best back-up and disk utilities to date." DEALER AND DISTRIBUTOR INQUIRIES INVITED

Order from

MICRO-WARE DIST, INC. 1342B Rt 23 Butler, NJ 07405 201-838-9027





# THE CLONE MACHINE™ FROM MICRO-WARE DIST. INC.

Take control of your 1541 disk drive with this indispensible disk users tool. The Clone Machine will allow you to copy programs, files, full or partial disks, and even allow track/block editing. Package includes:

- 1) Complete and thorough users manual
- 2) Copy with one or two drives
- 3) Copy all file types including relative files
- 4) Investigate and back-up many protected disks.
- 5) View track/block in HEX or ASCII
- 6) Easily edit track blocks
- 7) Display full contents of directory and print
- Commodore® 64 OWNERS 8) Change program names, add, delete files with simple keystroke
- 9) Easy disk intitialization
- 10) Supports up to four drives

All this for only \$49.95

**Special limited** introductory offer \$39.95

MR. SAD

"my only copy gone."

The NEW REVISED **Nibbles** Away

version C by **COMPUTERapplications** 

- 1) Full Apple lle compatibility 2) New autoloading to simplify parameter access
- 3) Added printer compatibility 4) Enhanced printing formats 5) CTRL P screen
- snapshot to printer 6) Enhanced sector editing
- 7) New disk data search & full disk diagnostics

APPLE II, FRANKLIN & 8) Subscription to NIBBLE NEWS Available for back up hints and new parameter settings.

NIBBLES AWAY II version C is still the best and most supported back up program available. Written about in the New York Times Business Section, Science 83, Digital retailing, and other publications as one of the most popular of its kind. A necessary program for all Apple & Franklin owners. List \$69.95

> Limited special offer only \$64.95

## 

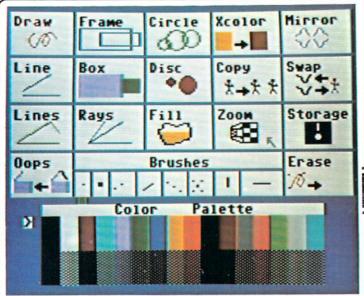


FIG. 1

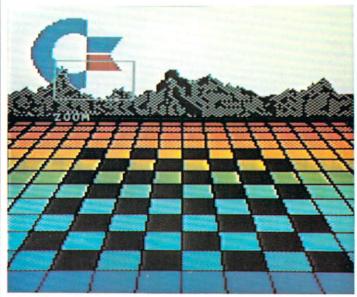


FIG. 2



FIG. 3



EVERYONE IS TALKING ABOUT IT. PEOPLE STAND IN LINE AT THE SHOWS TO TRY IT. "IT" IS A MARVELOUS NEW PERIPHERAL AND SOFTWARE PACKAGE THAT PACKS A TON OF FUN, AND IS USED WITH EQUAL DELIGHT BY YOUNG AND OLD. THE PHYSICAL COMPONENT (PICTURED ABOVE) IS A COMPACT, STYLISH "BOARD" WHICH MAY BE HELD IN HAND OR PLACED ON A FLAT SURFACE. IT IS PRESSURE SENSITIVE, RESPONDING EITHER TO A FINGERTIP OR A SPECIAL PLASTIC STYLUS (INCLUDED). SIMILAR IN APPLICATION TO A JOYSTICK OR TRACKBALL, THE KOALA PAD IS A MORE NATURAL FEELING INTERFACE BETWEEN HUMAN AND MACHINE. IN GRAPHICS APPLICATIONS, THE POINT OF PRESSURE ON THE PAD IS TRANSLATED TO A CORRESPONDING LOCATION ON THE SCREEN, AND WITH THE RIGHT SOFTWARE YOU ARE ABLE TO "DRAW" BY MOVING THE STYLUS ON THE PAD.

THE SOFTWARE THAT COMES WITH THE KOALA PAD ALLOWS MUCH MORE THAN JUST DRAWING, HOWEVER. LINES, RAYS, RECTANGLES, BOXES, CIRCLES, & DISKS ARE ALL CREATED BY POINTING WITH YOUR STYLUS, AND CLICKING YOUR BUTTONS. SHAPES ARE MADE IN TWO STAGES, THE FIRST STAGE SETS THE SIZE AND SHAPE OF YOUR LINE OR AREA- NOW MOVE YOUR LINE OR SHAPE AROUND- THE SECOND STAGE (PRESS YOUR BUTTON AGAIN) "GLUES" YOUR OBJECT TO THE SCREEN. IF YOU DON'T LIKE WHAT YOU DID, THE "OODPS" OPTION WILL UNDO YOUR LAST MISTAKE. THIS IS A UNIQUE AND WONDERFUL FEATURE NOT FOUND IN ANY OTHER GRAPHICS PACKAGE. IT INSTILLS EVEN YOUNG CHILDREN WITH A SENSE OF TOTAL CONFIDENCE-KNOWING THEY CAN FIX ANY MISTAKE WITH A SINGLE BUTTON.

FIG. 2 (OUR COVER PHOTO) SHOWS SOME OF THE DETAIL AND TEXTURE THAT CAN BE OBTAINED. THE MORE EXOTIC FEATURES INCLUDE: 4-WAY MIRRORING, FAST FILLING OF CLOSED SHAPES, COLOR EXCHANGE (REPLACE ALL THE YELLOW ON YOUR PAINTING WITH BLUE BY PRESSING A SINGLE BUTTON), COPY, AND ZOOM. FIG. 3 SHOWS THE BOXED PORTION OF FIG. 2 IN THE ZOOM MODE (WHERE YOU MAY PAINT EACH INDIVIDUAL DOT). SPEAKING OF DOTS, YOU HAVE 160 ACROSS BY 200 DOWN. ALSO, YOU HAVE OVER 125 COLORS TO CHOOSE FROM (THE PALETTE AT THE BOTTOM OF FIG. 1 SHOWS 32 OF THEM), & BRUSHES TO PAINT WITH. SCREENS MAY BE SAVED TO AND RECALLED FROM DISK (BUT SO FAR, THERE IS NO WAY TO SEND THEM TO YOUR PRINTER).

THIS IS AN OUTSTANDING PRODUCT IN EVERY WAY, AND IS EASILY ONE OF THE TOP TEN PRODUCTS FROM 1983. -EDITOR

CONTACT:

UNDER \$100.00

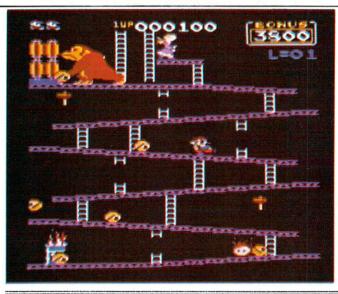
KOALA TECHNOLOGIES CORP. 4962 EL CAMINO REAL LOS ALTOS, CA 94022 800 227-6703



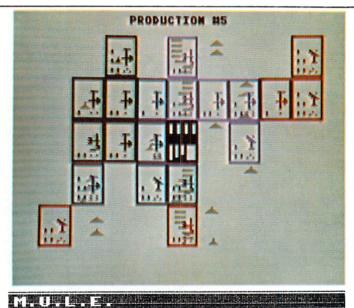
Bearlenaire de duction



CEPSTALL STATES



DONKEY KONG





ATTACK OF THE PHANTOM KARATE DEVILS

# BEACH-HEAD

DISK - \$34.95 - \*\*\*\*

ACCESS SOFTWARE
925 EAST 900 SOUTH
SALT LAKE CITY, UT 84105
801 532-1134

------

THIS IS THE BEST ANIMATED WAR-GAME SIMULATION WE HAVE SEEN YET. THE ANTI-AIRCRAFT SEQUENCE (PICTURED) IS THE BEST (OTHER SEQUENCES INCLUDE SHIP-TO-SHIP GUNNERY, BEACH-LANDING AND TANK ASSAULT, TORPEDO EVASION, AND A FINAL ATTACK ON A FORMIDABLE ARTILLERY EMPLACEMENT. ALL SEQUENCES ARE SMOOTHLY ANIMATED AND MAINTAIN A 3-DIMENSIONAL EFFECT (THOSE PLANES START AS LITTLE DOTS AND THEN GAIN SIZE AS WELL AS MENACING DETAIL AS THEY MAKE THEIR RUN ON YOUR SHIP) YOUR JOYSTICK CONTROLS ALL ACTION. THE REALISTIC SOUND EFFECTS NEVER GET MONOTONOUS, AND THEIR PITCH MAY BE ADJUSTED TO YOUR AUDIO EQUIPMENT. WAR MAY BE HELL, BUT BEACH-HEAD IS PURE FUN!

## DONKEY KONG

CARTRIDGE - \$44.95 - \*\*\*\*

ATARISOFT PO BOX 2943 SO. SAN FRANCISCO, CA 94080

THIS IS ONE OF A SERIES OF CLASSIC ARCADE GAMES THAT ATARI HAS DECIDED TO MAKE AVAILABLE ON THE COMMODORE 64. WE HAVE TRIED SEVERAL OF THESE, AND THEY ARE ALL VERY GOOD. ATARI CONFIDES THAT THE 64 VERSIONS ARE THE BEST THEY HAVE EVER DONE. DONKEY KONG IS A FAITHFUL REPRODUCTION WITH COMPLEX ANIMATION, ALL THE RIGHT MUSIC AND SOUNDS, AND ALL THE ORIGINAL SCREENS. (THIS HAS TO BE BAD NEWS FOR CHUCK E. CHEESE!) ALSO AVAILABLE NOW ARE: ROBOTRON/ CENTIPEDE/DIG-DOUG/ DEFENDER/ & PAC-MAN. BEFORE SPRING THERE WILL ALSO BE: STARGATE/ JOUST/ POLE POSITION/ GALAXIAN/JUNGLEHUNT/ MOON PATROL/ MS. PACKMAN/ AND BATTLEZONE. WE CAN'T WAIT!

# PURPLE TURTLES

TAPE (DISK SOON) - \$29.95 - \*\*\*

QUICKSILVA INC. 426 WEST NAKOMA SAN ANTONIO, TX 78216 512 492-8054

------

THIS IS A HARMLESS 6AME WHICH, WHILE LACKING THE STAR QUALITY OF SOME OF THE OTHERS ON THIS PAGE, IS NONETHELESS A PLEASANT AND COLORFUL DIVERSION WHICH WILL ESPECIALLY APPEAL TO YOUNGER CHILDREN AND LESS AGRESSIVE PERSONS. IT IS ACTUALLY MORE DIFFICULT THAN IT LOOKS TO SCORE HIGH IN PURPLE TURTLES. AS YOU TRY TO CROSS THE STREAM TO PICK UP THE CHANGING FRUIT DROPPING FROM THE TREE (AND RETURN TO IMPRESS THE OWL), THE PESKY REPTILES TAKE TURNS DIVING DEEP AND DEPRIVING YOU OF THE NECESSARY FOOTING REQUIRED TO COMPLET YOUR TRAVERSE. WEAR YOUR WADERS. ALSO AVAILABLE: AQUAPLANE/ QUINTIC WARRIORS/ AND RING OF POWER.

#### 

CARTRIDGE - \$44.95 - \*\*\*\*

PARKER BROTHERS 50 DUNHAM ROAD BEVERLY, MA 01915 617 927-7600

-----

THIS IS, IN OUR OPINION, ONE OF THE ALL-TIME ARCADE CLASSICS. NON- VIOLENT, CUNNINGLY SIMPLE, CHARMING CHARACTERS, A COMPELLING (IF NOT ADDICTIVE) USE OF GEOMETRY PROBABILITY, UNUSUAL SOUND- EFFECTS, A SMATTERING OF FREUDIAN SYMBOLISM, AND AN EXTREMELY SIMPLE CONTROL INTERFACE- A FOUR POSITION JOYSTICK. WE HAVE SEEN MANY OF THE ALREADY RELEASED VERSIONS OF OXBERT FOR OTHER MACHINES, AND THE 64 VERSION IS ABSOLUTELY THE CLOSEST TO THE ORIGINAL. IF YOU ARE A OXBERT FAN, YOU CAN SAVE YOUR GUARTERS AND OWN OXBERT INSTEAD OF JUST RENTING HIM (OR IS IT A HER?).

# M.U.L.E.

DISK - \$40.00 - \*\*\*\*

ELECTRONIC ARTS 2755 COMPUS DRIVE SAN MATED, CA 94493 415 571-7171

THIS IS A CHARMING GAME WITH SOMETHING FOR EVERYONE.
M.U.L.E. GETS OUR VOTE FOR "BEST MUSICAL SCORE IN A
COMPUTER GAME" THIS YEAR. CAN BE PLAYED BY FROM 0 TO 4
HUMAN PARTICIPANTS (THE COMPUTER WILL HAPPILY PLAY ALL FOUR
PLACES BY ITSELF). THIS IS SORT OF AN OFF-PLANET MONOPOLY
GAME WITH PLENTY OF HORSE- TRADING, BACK- STABBING, LUCKY
BREAKS & DISASTERS & JUST THE RIGHT AMOUNT OF COMIC RELIEF.
USING YOUR CUNNING AND SHREWDNESS, YOU TRY TO BUILD AN
ECONOMIC EMPIRE BASED ON FOOD, ENERGY, "SMITHORE", AND (IN
THE TOURNAMENT MODE) "CRYSTITE". EVERYTHING ABOUT
ELECTRONIC ARTS SHINES- FROM PACKAGING & DOCUMENTATION TO
THEIR CORPORATE VISON OF PLAY AS ART.

# ATTACK OF THE PHANTOM KARATE DEVILS

DISK OR TAPE - \$34.95 - \*\*\*+

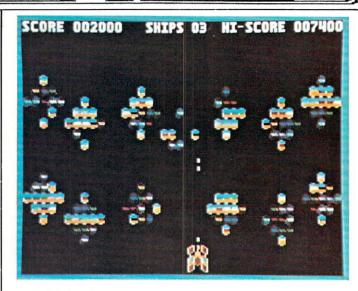
PHANTOM SOFTWARE 1116-A 8TH ST., SUITE 155 MANHATTAN BEACH, CA 90266 213 379-8686

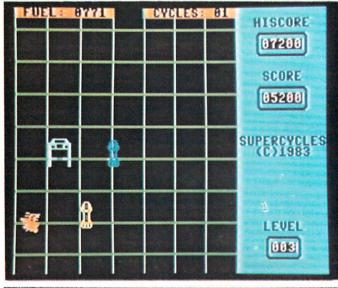
-----

"GRASSHOPPER, YOU ARE READY TO LEAVE THE TEMPLE..." THIS IS THE ONLY MARTIAL-ARTS ANIMATED SIMULATION WE KNOW OF. IT ALSO IS TIED, IN OUR ESTIMATION, WITH "BABIES OF THE DIRT" FOR BEST GAME TITLE OF 1983! BRUCE LEE WOULD LOVE THIS ONE: WITH YOUR JOYSTICK YOU HAVE TOTAL CONTROL OVER THE WELL-ANIMATED KICKS, PUNCHES, LEAPS, & BLOCKS OF YOUR DISCIPLINED EMPTY-HANDED WARRIOR. YOU MUST AVENGE THE NINJAS' BARBARIC DEEDS, DODGE DEADLY THROWING- STARS & KNIVES, AND TAKE ON ENDLESS BLACK-CLAD NINJAS. YOUR STRENGTH VARIES WITH YOUR INJURIES AND FIGHTING PROWESS. SURVIVE EACH CHALLENGE AND GET PROMOTED IN DAN (BELT)!

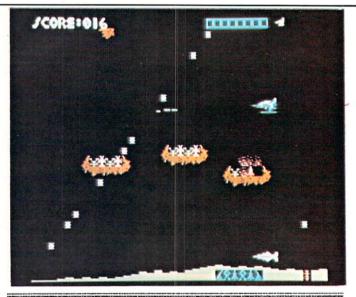


ROBUTRON 2084





SUPERCYCLES







UP FOR GRABS

#### ROBOTRON: 2084

CARTRIDGE - \$44.95 - \*\*\*\*

ATARISOFT PO BOX 2943 SO. SAN FRANCISCO, CA 94080

ANOTHER ATARI CONVERSION OF A COMPLEX ARCADE GAME. THE STRANGE-LOOKING HERO MUST SAVE HUMANDIDS AND DESTROY INCREASINGLY DIFFICULT ROBOT- ANTAGONISTS. THIS CONVERSION DOES NOT QUITE (ALMOST, BUT NOT QUITE) HAVE THE SPEED OR RESPONSIVENESS OF THE \$4000 ARCADE VERSION, BUT CONSIDERING THE PRICE DIFFERENCE, YOU SHOULD BE QUITE DELIGHTED. FRANKLY, WITH ALL THAT GOES ON AT ONCE IN THIS FRANTIC SURVIVAL ORDEAL, WE ARE AMAZED THAT ATARI WAS ABLE TO DO AS WELL AS THEY HAVE WITH "ROBOTRON".

# SUPERCYCLES

DISK - \$31.95 - \*\*\*

PIONEER SOFTWARE INC. #217 - 620 VIEW STREET VICTORIA, BC CANADA V8W 1J6 604 381-3211

\_\_\_\_\_\_

IF YOU SAW THE MOVIE "TRON", YOU WILL RECOGNIZE MANY OF THE ELEMENTS IN THIS GAME. YOU HAVE YOUR YELLOW LIGHT-CYCLE, ENEMY BLUE CYCLES, RECOGNIZERS, TANKS, AND (OF COURSE) THE GAME GRID. WITH YOUR TRUSTY JOYSTICK YOU ROAM THE GRID, LEAVING TIMED "LIGHT-BOMBS" FOR THE OTHERS. WHEN YOU ARE LOW ON FUEL YOU MUST MOTOR INTO THE NEXT SCREEN AND TANK UP WITH LIGHT-CYCLE FUEL (NOT AN EASY TASK, IT TURNS OUT) AND THEN GET BACK INTO THE FRACAS. THE GRAPHICS ARE NOT TOO SHABBY, AND THE GAME IS FAST & CHALLENGING, BUT THE SOUND EFFECTS CAN WEAR ON THE NERVES AFTER AWHILE: LACKS THE DEPTH NEEDED TO CAUSE REALLY EXCESSIVE DISK WEAR.

# KILLER PILLER

DISK/TAPE - \$12.75/\$9.99 - \*\*\*+

CASTLE SOFTWARE, INC. PO BOX 350 NEW CASTLE, DE 19720 302 429 8565

------

AT FIRST GLANCE, THIS APPEARS TO BE A CENTIPED CLONE. NOT SD, INSECTICIDE-BREATH! MANY SUBTLE DIFFERENCES MAKE THIS REALLY QUITE A DIFFERENT ANIMAL. THERE IS A 'PILLER, BUT IT LAYS EGGS THAT ARE TIME-RELEASED MOTHS (THE RED ONES ARE THE DANGEROUS ONES): AS THE MOTH EGGS HATCH, THEY SPREAD WINGS AND MENACE YOUR BUG-SPRAYER. TO MAKE MATTERS WORSE, TO SPRAY THE 'PILLER, YOU MUST RISK SPRAYING THE TREES IN YOUR FOREST WHICH YOU ARE TRYING TO PROTECT. BUG SPRAY KILLS TREES. OOPS! 'PILLERS EAT TREES. RUN OUT OF TREES AND YOU LOSE...GOOD LUCK. GOOD GAME. LOW PRICE!

## GALACTIC BATTLES

DISK - \$19.95 - \*\*\*+

CYBERIA INC. PD BOX 784 AMES, IA 50010 800 247-3900

\_\_\_\_\_\_\_

MULTIPLE-SCREEN SPACE THEME. SOME VERY UNUSUAL SOUND EFFECTS ARE FEATURED IN THIS GAME. MACHINE LANGUAGE GIVES THIS GAMES SPEED AND SMOOTH-SCROLLING ANIMATION. BASICALLY THE OBJECT IS TO SHOOT YOUR WAY PAST VARIOUS OBSTACLES AND LAST AS LONG AS YOU CAN. DIFFICULTY INCREASES AS YOU ADVANCE THRU SUCCESSIVE SCREENS. JOYSTICK REQUIRED. WE WERE QUITE PLEASED WITH THE UNUSUAL GRAPHICS AND SOUNDS. THIS IS THE KIND OF GAME THAT CAN BE CREATED BY INTERMEDIATE- LEVEL BASIC PROGRAMMERS USING "CRYSTAL"; CYBERIA'S SOON-TO-BE-RELEASED GAME-DEVELOPMENT LANGUAGE FEATURING FORTH-LIKE SPEED AND BASIC-LIKE SIMPLICITY (SEE PROGRAMMING SECTION OF PRODUCT ROUNDUP).

## LASER STRIKE

DISK/TAPE - \$29.95/24.95 - \*\*\*

ISIS HATHOR DIGITAL PRODUCTIONS 6184 VERDURA AVE. GOLETA, CA 93117

\_\_\_\_\_\_

THE AMAZING THING ABOUT THIS GAME IS THAT IT WAS WRITTEN BY 11TH-GRADER PARRY GRIPP ENTIRELY IN MACHINE LANGUAGE. THE GAME HAS SOME HUMOROUS ELEMENTS, LIKE THE STUBBY SPACE SHIP AND THE CARRIERS FULL OF ALIENS LOOKING LIKE "COSMIC CANCES". BUT SERIOUSLY, FOLKS, YOU HAVE A LOT OF SHOOTIN' AND BOMBIN' TO DO, SO WIPE THE GRIN OFF AND CRANK UP THE THRUSTERS! AFTER YOU GET TO A SECOND SCREEN: THE ICE CAVES. THIS IS A SCROLLING TUNNEL SITUATION, REQUIRING A STEADY HAND ON THE JOYSTICK. THO NOT HEADED FOR THE HALL OF FAME, THIS GAME IS A GOOD FIRST EFFORT, AND WE EXPECT TO SEE PARRY'S NAME CROPPING UP AGAIN.

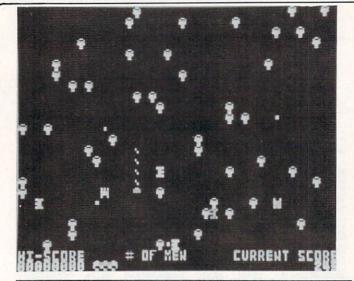
## UP FOR GRABS

CARTRIDGE - \$34.95 - \*\*\*\*

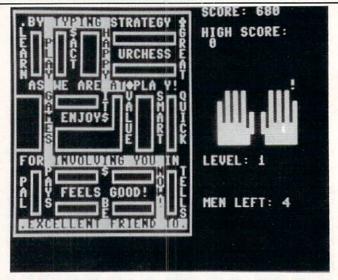
SPINNAKER SOFTWARE 215 FIRST STREET CAMBRIDGE, MA 02142 517 868-4700

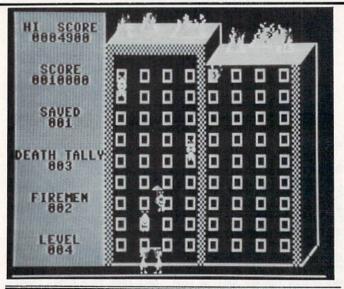
THIS IS A FUN AND EDUCATIONAL SCRABBLE-LIKE GAME THAT REWARDS QUICK REFLEXES, PLANNING, AND SPELLING & VOCABULARY SKILLS. IN THE CENTER OF THE SCREEN IS A SPINNING CUBE (THIS IS A FASCINATING EFFECT TO WATCH) ON WHICH RANDOM LETTERS ARE DISPLAYED. PLAYERS WHO PUSH PADDLE OR JOYSTICK BUTTONS FIRST GET TO PICK A LETTER OFF THE CUBE AND PLACE IT IN THEIR OWN CROSSWORD-LIKE GRID. POINTS ARE SCORED FOR LETTERS USED AND BONUS SQUARES OCCUPIED. PLAYERS MUST JUDGE SPELLING FOR THEMSELVES. GOOD FAMILY GAME FOR UP TO FOUR PLAYERS.



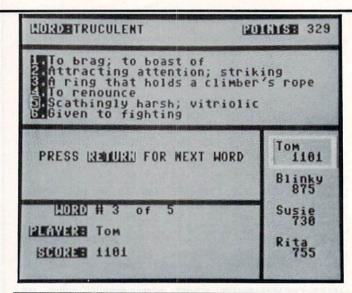


METAMORPHOSIS

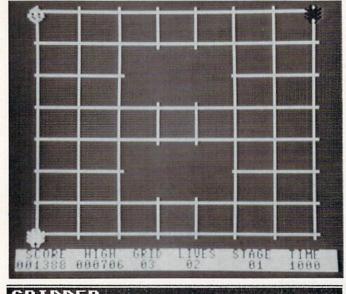




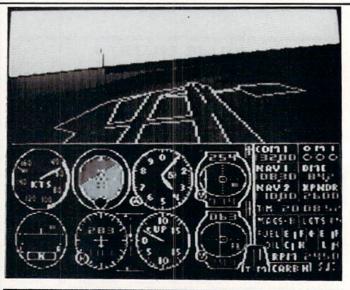
TOWERING INFERNO



WORDRACE



GRIDDER



FLIGHT SIMULATOR II

## 

# METAMORPHOSIS

DISK/TAPE - \$19.95 - \*\*\*+

VICTORY SOFTWARE INC.
7 VALLEY BROOK ROAD
PAOLI, PA 19301
215 296-3787

\_\_\_\_\_\_

A MULTI-SCREEN ORIGINAL ARCADE GAME SOMEWHAT ALONG THE LINES OF ROBOTRON, (ONE SCREEN IS LIKE THE GRID-SPIDER SCREEN IN THE TRON GAME). YOU ARE IN THE NEST OF THE CYGLORX AND HAVE YOUR HANDS FULL FIGHTING ROBOT TANKS WHO ARE GUARDING CYGLORX EGSS (NOT THE KIND YOU EAT). YOU WILL NEED TO BE AN ACCOMPLISHED CYGLORXIAN-FIGHTER TO GET THRU THE ADVANCED SCREENS. GOOD ANIMATION AND DECENT SOUND EFFECTS. THIS IS ONE OF THE BEST GAMES VICTORY HAS COME OUT WITH SO FAR. WHEN YOU'RE READY, THEY HAVE TWO MORE SEQUELS: CREATOR'S REVENGE, AND LABYRINTH OF THE CREATOR. JOYSTICK REQUIRED.

## TOWERING INFERNO

DISK - \$34.95 - \*\*\*+

PIONEER SOFTWARE INC. #217 - 629 VIEW STREET VICTORIA. BC CANADA V8W 1J6 604 381-3211

HERE'S A DIFFERENT KIND OF GAME: YOU CONTROL A PAIR OF FIREPERSONS WITH YOUR JOYSTICK- TRYING TO CATCH CUTE LITTLE BLOBBY CRITTERS LEAPING FROM A BURNING BUILDING. WHEN YOU MISS, THEY SQUISH ON THE PAVEMENT AND YOU LOSE POINTS. OCASSIONALLY, REALLY BIG BLOBBY CRITTERS JUMP- THESE ARE NOT HEALTHY TO CATCH. ALSO, THERE ARE TELEVISION SETS BEING THROWN DOWN FROM TIME TO TIME WHICH MAY BE CAUGHT - SOMETIMES - FOR EXTRA POINTS. OUR OFFICIAL STAFF-GRADESCHOOLERS LIKE THIS QUITE A BIT (THO IT'S NOT CLEAR WHETHER THEY LIKE TO CATCH OR MISS MORE.) GOOD M.L. ANIMATION.

#### GRIDDER

DISK/TAPE - \$24.95/19.95 - \*\*\*

MICRODIGITAL PO BOX 1110 WEBSTER, NY 14580 800 833-7384

-----

GRIDDER IS AN OK CHASE GAME WHICH HAS YOU (A FACE) SLIDING ALONG ONE OF 256 POSSIBLE GRID PATTERNS TRYING TO COVER THE ENTIRE GRID BEFORE THE GRID-CHASERS GETCHA. 100% MACHINE LANGUAGE PROVIDES SMOOTH AND FAST ACTION. OUR OFFICIAL STAFF GRADESCHOOLERS GOT THRU THE FIRST 4 LEVELS BEFORE THEY GOT BORED- MAYBE THEY'RE JUST GETTING JADED FROM ALL THE GAMES THEY'RE FORCED TO PLAY. TWO OTHER GAMES FROM MICRODIGITAL (SNAKMAN, AND SKRAMBLE) ARE BETTER, (BUT HARDER TO PHOTOGRAPH).

# LETTER-MAN

DISK - \$34.95 - \*\*\*

BEHAVIORAL ENGINEERING 230 MT. HERMON ROAD / SUITE 207 SCOTTS VALLEY, CA 95066

\_\_\_\_\_\_

THIS IS A GAME, BUT IT IS A GAME INTENDED TO SUBTLY DEVELOP MAXIMUM TYPING AND KEYBOARD SKILLS. A TECHNIQUE CALLED "NEURO-LINGUISTIC PROGRAMMING" (NLP) DEVELOPED BY ROBERT DILTS (WHO HEADS BEHAVIORAL ENGINEERING) IS EMPLOYED TO CAUSE THE MAXIMUM BENEFIT TO USERS. NLP HAS TO DO WITH IMPLEMENTING IN EXERCISES WHAT HAVE BEEN IDENTIFIED AS THE EFFECTIVE STRATEGIES USED BY PERSONS WHO HAVE ALREADY ACHIEVED EXCELLENCE IN A CLOSELY RELATED ACTIVITY. ON THE SURFACE, LETTER-MAN IS AN INTERESTING TYPE-TO-GET-THRU-THE-MAZE GAME (OFTEN REQUIRING TYPING WORDS BACKWARDS): BEYOND THAT, IT IS AN INTRIGUING EXPERIMENT IN ALTERNATIVE LEARNING TECHNIQUES.

#### WORDRACE

DISK/TAPE - \$34.95/19.95 - \*\*\*

\_\_\_\_\_\_

DON'T ASK SOFTWARE
2265 WESTWOOD BLVD., SUITE B-150
LOS ANGELES, CA 90064
213 477-4514

WORDRACE IS A WORD-GAME PLAYER'S WORD-GAME. DRAWING ON A 2500-WORD VOCABULARY PLUS A BANK OF 1200 FAMOUS PEOPLE, WORDRACE CAN KEEP ANY AGE GROUP CHALLENGED WITH A SEEMINGLY ENDLESS VARIETY OF QUESTIONS. WORDRACE IS A 1 TO 4 PLAYER MULTIPLE-CHOICE GAME REQUIRING PLAYERS TO MATCH DEFINITIONS TO WORDS- TIME, AS WELL AS WRONG ANSWERS WILL AFFECT YOUR SCORE. 4 LEVELS CHALLENGE PLAYERS FROM AGE 9 TO PROFESSOR. IN THE HARDEST LEVEL, YOU WILL SEE WORDS THAT YOU HAVE NEVER HEARD BEFORE! SPORTS AND FAMOUS PERSONS VERSIONS ARE ALSO INCLUDED.

# FLIGHT SIMULATOR II

DISK - \$49.95 - NO RATING

SUBLOGIC CORP. 713 EDGEBROOK DRIVE CHAMPAIGN, IL 61820 800 637-4983

-----

IT IS OUR POLICY TO NOT RATE PRODUCTS WE HAVE NOT ACTUALLY TRIED, NO MATTER HOW GOOD THEY SOUND. WE HAVE, HOWEVER, SEEN THIS SIMULATOR ON OTHER MACHINES, AND FROM THE PHOTO OF THE 64 SCREEN, IT SHOULD PROVE NO DISAPPOINTMENT. PRACTICE TAKEOFFS, LANDINGS, AEROBATICS. FEATURES OVER 80 AIRPORTS IN FOUR SCENERY AREAS; NEW YORK, CHICAGO, SEATTLE, AND L.A. ADDITIONAL SCENERY AREAS AVAILABLE. HI-SPEED COLOR 3-D GRAPHICS SHOW DAY, DUSK, AND NIGHT FLYING IN YOUR CHOICE OF WEATHER CONDITIONS. ALSO INCLUDES WORLD WAR I AERIAL BATTLE GAME. THIS IS THE CHEAPEST PIPER 181 CHEROKEE ARCHER YOU CAN BUY WITH ALL THE INSTRUMENTS WORKING!

# PRODUCT NEWS

#### E ECTRONIC ARTS

ELECTRONIC ARTS IS ONE THE BRIGHTEST NEW STARS TO JOIN THE RANKS OF SOFTWARE HOUSES CREATING RECREATIONAL SOFTWARE FOR THE 64. SEVERAL OF THEIR GAMES ARE PURE GOLD, AND IF YOU CAN ONLY AFFORD ONE NEW GAME THIS CHRISTMAS, CHECK OUT "PINBALL CONSTRUCTION SET" BEFORE YOU PART WITH YOUR CASH (SEE "OTHER SAMES" IN ROUNDUP, AND "FALLERY", PAGE 6). IF YOU LIKE "PINBALL", THEN YOU WILL BE GLAD TO KNOW THAT "MUSIC CONSTRUCTION SET", USING THE SAME ICON AND POINTER APPROACH, HAS JUST BEEN RELEASED FOR THE 64.

#### APPLE EMULATOR

YES, VIRGINIA, THERE IS AN APPLE EMULATOR. AT LAST (AFTER SEVERAL FALSE ALARMS FROM COMPANIES WITH MORE BRAG THAN HARD GOODS) A PACKAGE IS BEING RELEASED (BY THE TIME YOU READ THIS) FROM PIONEER SOFTWARE (CANADIAN) THAT PROMISES NOT ONLY TO RUN 100% OF THE AVAILABLE APPLE II SOFTWARE (ON A 64 WITH A 1541 DISK DRIVE), BUT TO ACCEPT APPLE PERIPHERALS IN A SLOTTED EXPANSION MODULE. THIS AT MUCH LESS THAN THE COST OF AN APPLE II (THE COMPLETE SYSTEM WILL BE ABOUT \$600 U.S.) SO IF YOU WANT TO BUY A RANA DRIVE FOR YOUR 64 - NO PROBLEM! (SEE "OTHER INTERFACES, PAGE 54).

#### 3-D GRAPHICS PACKAGE

ALSO FROM PIONEER SOFTWARE IS A FASCINATING GRAPHICS PACKAGE. WITH THIS SYSTEM, YOU CAN DRAW A 3-D ROOM, THEN MOVE YOUR VIEWPOINT TO ANYPLACE IN 3-D SPACE, EVEN 6D INSIDE THE ROOM & LOOK OUT! THE SYSTEM ALSO PROVIDES FACILITIES FOR ANIMATING 3-D SEQUENCES WITH UP TO 1/2 HR. OF CONTINUOUS ANIMATION POSSIBLE ON ONE DISKETTE! THE 3-D IMAGES AND ROUTINES ARE CALLABLE FROM OTHER SOFTWARE, AND WILL INTERFACE WITH THE KOALA PAD AND MANY LIGHT PENS FOR CONVENIENT COMPOSITION AND EDITING. (SEE "GRAPHICS", PAGE 41)

#### ONE MEGABYTE FOR THE 64

NO, WE HAVEN'T BEEN BOMBARDED WITH CRT RAYS TOO LONG- YOU WILL SOON BE ABLE TO USE ONE WHOLE MEG WITH THE 64 THANKS TO THE DEVELOPMENT OF A PROPRIETARY MEMORY-ACCESSING AND MANAGEMENT TECHNOLOGY DEVELOPED BY MOSAIC ELECTRONICS. MAKING ITS FIRST PUBLIC APPEARANCE AS "ACCESS-M" FOR THE COMMODORE 64, THE BASIC EXPANSION UNIT COMES WITH 64K RAM FOR \$250.00, AND MAY BE EXPANDED BY THE USER, OR THE FACTORY, IN 64K INCREMENTS TO THE FULL 1 MEG. THE UNIT CAN BE USED EITHER AS A DISK EMULATOR (RAMDISK), OR AS SYSTEM RAM WITH POWERFUL NEW APPLICATIONS SOFTWARE BEING DEVELOPED TO TAKE ADVANTAGE OF THIS EXCITING BREAKTHRU. (SEE PAGE 55. "MASS STORAGE")

#### BAR CODE READER

THE "OSCAR MODEL I" BAR CODE READER, RECENTLY INTRODUCED BY DATABAR CORP., IS NOW BEING PRODUCED IN A 64-COMPATIBLE VERSION FOR \$79.95. THIS UNIQUE PERIPHERAL READS A SPECIAL TYPE OF BAR CODE (NOT THE STANDARD UPC TYPE) AND SIMPLIFIES ENTERING DATA AND PROGRAMS IN A PRINTED FORM. DATABAR IS PUBLISHING SOFTWARE IN THE FORM OF A MONTHLY MAGAZINE WITH OSCAR-READABLE PROGRAM LISTINGS (AT LEAST 8 PER ISSUE), FOR A \$10 PER MONTH SUBSCRIPTION. OSCAR I COMES WITH 8 PROGRAMS IN BAR-CODE FORMAT, AND A GUIDE TEMPLATE TO AID PROPER SCANNING. (CONTACT: DATABAR CORP. / 10202 CROSSTOWN CIRCLE/EDEN PRARIE, MN 55344/ (612) 944-5700.)

#### 

OF THE MANY NEW PRODUCTS APPEARING THIS WINTER, THE "MIND-CONTROL" INTERFACE FROM BEHAVIORAL ENGINEERING IS ONE OF THE MOST INTRIGUING. USING A SIMPLE SENSOR WHICH REPLACES THE JOYSTICK AND MONITORS THE USER'S GALVANIC SKIN RESISTANCE, THE USER IS ABLE (AFTER SOME TRAINING) TO DIRECT CURSORS OR OTHER OBJECTS ON THE SCREEN MERELY BY "THINKING". THE GSR SENSOR CAN DISTINGUISH AMONG THE SUBTLY DIFFERENT ELECTRICAL OUTPUTS IN THE SKIN ASSOCIATED WITH THE USERS THOUGHTS OF, FOR INSTANCE, UP, DOWN, LEFT, RIGHT, ETC. THE SENSOR AND SOFTWARE (WHICH INCLUDES A TRAINING GAME) WILL COST ABOUT \$40.00 WITH ADDITIONAL MIND-CONTROLLED SOFTWARE SCHEDULED FOR RELEASE IN 1984. (HMMM, "MIND-CONTROLLED SOFTWARE SCHEDULED FOR RELEASE IN 1984. (HMMM, "MIND-CONTROLLED SOFTWARE IN 1984..." - GEORGE ORWELL, LOOK OUT.) CONTACT: BEHAVIORAL ENGINEERING/ 230 MT. HERMAN ROAD - SUITE 207/ SCOTTS VALLEY, CA 95066/ (408) 438-5649.

#### FLYING THE 64

WHEN IT RAINS IT POURS! LAST ISSUE WE HAD NOT ONE ANIMATED FLIGHT SIMULATOR TO REPORT FOR THE 64: THIS TIME THERE ARE SEVERAL (SEE RECREATION - STRATEGY AND SIMULATION PAGE 46). SUBLOGIC HAS RELEASED ITS FLIGHT SIMULATOR II FOR THE COMMODORE 64 WHICH LOOKS AND SOUNDS ALOT LIKE THE FAMOUS MICROSOFT SIMULATOR FOR THE IBM PC. YOU CAN NOW GO FLYING ALL OVER THE COUNTRY IN YOUR PRIVATE AIRCRAFT (OR WORLD WAR I FIGHTER) WITHOUT LEAVING YOUR COMPUTER DESK. FLYERS HAVE CONTROL OVER WEATHER CONDITIONS, AND CAN LAND AT SIMULATED AIRPORTS IN THE NATIONS GREAT CITIES. FULL REAL-TIME INSTRUMENTATION AND ANIMATED COCKPIT VIEW MAKE THIS A REALISTIC FLYING EXPERIENCE. (SEE "GALLERY", PAGE 10).

## ATARI GAMES FOR THE 64 >

WELL, IF YOU BOUGHT A 64 BECAUSE IT IS THE BEST COMPUTER AROUND FOR THE MONEY, BUT ALWAYS WISHED YOU COULD PLAY THE "REAL" PAC-MAN, DONKEY KONG, AND DEFENDER- YOU ARE ABOUT TO HAVE YOUR CAKE AND BE ABLE TO EAT IT TO! ATARI HAS DECIDED TO JOIN 'EM AND IS MARKETING DOZENS OF CLASSIC ARCADE GAMES THIS YEAR FOR B DIFFERENT SYSTEMS. THE BEST VERSIONS (NOT SURPRISINGLY) ARE FOR THE 64. CARTRIDGES ARE NOW AVAILABLE FOR: PAC-MAN, DONKEY KONG, ROBOTRON: 2084, DIG DOUG, CENTIPEDE, & DEFENDER. BY SPRING (IF YOU HAVE TIRED OF THESE, OR WORN THE GOLD PLATING OFF THE EDGE CONNECTORS) YOU WILL ALSO BE ABLE TO GET: JOUST, JUNGLE HUNT, MOON PATROL, POLE POSITION, GALAXIAN, STAR GATE, MS. PAC-MAN, AND BATTLE ZONE! (SEE 'GALLERY' FOR PHOTOS OF DONKEY KONG, AND ROBOTRON.)

#### THE ICONS ARE COMING

FIRST WE HEARD ABOUT COMMODORE'S "MAGIC DESK", NOW SEVERAL SOFTWARE HOUSES ARE PREPARING ICON-BASED SOFTWARE PACKAGES FOR RELEASE EARLY IN 1984. ONE SUCH PRODUCT IS SIMPLY CALLED "JANE" (SEE PAGE 25, "INTEGRATED HOME/BUSINESS"). JANE IS A USER INTERFACE THAT WILL INITIALLY OFFER WORDPROCESSING, SPREADSHEET, AND FILING FUNCTIONS UNDER THE CONTROL OF A "MOUSE" POINTING DEVICE AND SETS OF SYMBOLS ("ICONS"). ANOTHER COMPANY READYING AN ICON PRODUCT IS SIERRA ON-LINE: "HOMEWORD" IS THE NAME OF THEIR NEW WORDPROCESSOR WHICH FEATURES A GRAPHIC MENU, AND A "TRUE PAGE VIEW" WINDOW THAT SHOWS DOCUMENT LAYOUT GRAPHICALLY, OVERCOMING ONE OF THE LIMITATIONS OF 40-COLUMN WORDPROCESSING (THE INABILITY TO SEE HOM THE PAGE ACTUALLY LOOKS BEFORE PRINTING).

(SEE "WORDPROCESSING, NEW ADDITIONS" ON PAGE 29).

# GREY SHADED 1-PICTURE SDAK TIME: 358







: a line a !!

THE MICRON EYE DIGITAL CAMERA IS A UNIQUE PERIPHERAL WHICH ALLOWS YOUR C64 TO "SEE". THE LATEST VERSION OF THE MICRON EYE HAS SEVERAL IMPROVEMENTS IN THE SOFTWARE AREA WHICH ARE A GREAT IMPROVEMENT OVER EARLIER RELEASES. SO FAR, THIS IS THE ONLY CAMERA WE KNOW OF THAT IS READY TO USE WITH THE 64 AND AVAILABLE TODAY.

THE UNIT SHOWN HERE IS THE "BULLET" MODEL, WHICH IS THE LEAST EXPENSIVE, AND IS ALSO THE MOST COMPACT; ANOTHER MODEL IS AVAILABLE WHICH CAN OPERATE AT MUCH GREATER DISTANCES FROM THE COMPUTER THAN THE BULLET. THE BULLET PACKAGE CONSISTS OF THE "OPTIC RAM" SOLID STATE IMAGING DEVICE (ACTUALLY AN EXPOSED LIGHT-SENSITIVE MEMORY CHIP), A C-MOUNT LENS WITH SHUTTER AND FOCUS, A UNIVERSAL TRIPOD, A CARTRIDGE-TYPE INTERFACE, SYSTEM DISK, & MANUAL. PLUG IT IN, TURN IT ON, AND YOU HAVE PICTURES ON YOUR SCREEN (PROVIDED YOU REMOVE THE LENS-CAP!)

ONCE YOU ARE RUNNING, THERE ARE SEVERAL MODES TO CHOOSE FROM INCLUDING GREY SHADED OR BLACK, NORMAL OR ENHANCED SIZES, AND SINGLE OR DOUBLE PICTURE MODE. THE PHOTOS TO THE LEFT SHOW SEVERAL OF THESE MODES, WHICH CAN BE IDENTIFIED BY THE STATUS LINE AT THE TOP OF SCREEN. WE SHOT THE PICTURES OF OUR STAFF ALIEN & THE EDITOR (HOPE YOU CAN TELL WHICH IS WHICH!) ON A 1701 COLOR MONITOR. WITH THE RIGHT LIGHTING, VERY GOOD RESULTS CAN BE ACHEIVED. WHILE OPERATING, YOU CAN SAVE IMAGES TO OR LOAD FROM DISK. YOU CAN ALSO DUMP THE IMAGES TO A GRAPHICS PRINTER.

THE SYSTEM DOESN'T COME WITH ANY REALLY PRACTICAL APPLICATIONS SOFTWARE, BUT THE DOCUMENTATION AND SUPPORT IS GOOD, AND EXPERIMENTERS, HOBBYISTS, AND PROGRAMMERS SHOULD BE ABLE TO DEVELOP SOME INTERESTING SOFTWARE TO MAKE USE OF THIS TECHNOLOGY.

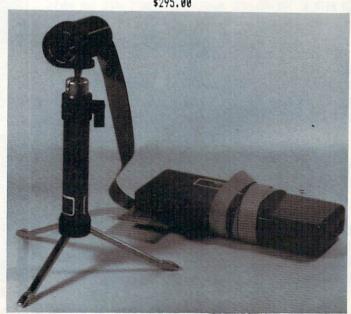
AN INTERESTING NOTE IS THAT THE PICTURE FILES CREATED BY MICRON EYE, SORCERER'S APPRENTICE, AND FLEXIDRAW, CAN ALL BE LOADED AND MANIPULATED BY THE OTHERS, THUS IT IS POSSIBLE TO SHOOT A LANDSCAPE IN GREY SCALE, DO SOME LIGHT-PEN "AIR-BRUSHING" TO IT, AND FINALLY COLOR IT IN WITH SORCERER'S APPRENTICE!

MICRON EYE IS REASONABLY-PRICED, AND THE COMPANY IS VERY HELPFUL WITH TECHNICAL QUESTIONS AND CUSTOM APPLICATIONS.

CONTACT:

MICRON TECHNOLOGY INC. 2805 EAST COLUMBIA ROAD BOISE, ID 83706 / (208) 383-4000

\$295.00



#### 

-SHARON ZARDETTO AKER

THE COMMODORE 64 HAS FINALLY BEEN AROUND LONG ENOUGH FOR THE PUBLISHING WORLD TO CATCH UP WITH IT. THOSE OF YOU WHO WERE FRUSTRATED BY THE USER'S MANUAL AND COWED BY THE PROGRAMMER'S GUIDE, TAKE HEART! WHEN IT COMES TO 64 PROGRAMMING. THERE ARE TWO BOOKS FOR BEGINNERS AVAILABLE.

"I SPEAK BASIC TO MY COMMODORE 64" IS THE LATEST ADDITION TO AUBREY JONES' LINE OF "I SPEAK BASIC" BOOKS. DESIGNED FOR CLASSROOM USE, IT IS ALSO EMINENTLY SUITED TO THE BEGINNER WHO IS LEARNING ALONE. IT HAS PLENTY OF EXAMPLES, MOVES SLOWLY, AND REVIEWS OFTEN.

"I SPEAK BASIC" COVERS PROGRAMMING CONCEPTS THAT APPLY TO ALL COMPUTERS, IN SPECIFICS THAT APPLY TO COMMODORE. WHILE IT INCLUDES THE USE OF GRAPHIC SYMBOLS, IT DOES NOT COVER THE 64'S SPECIAL SPRITE GRAPHICS, PROGRAMMABLE CHARACTERS, OR SOUND CAPABILITIES. ITS TEXT LAYOUT AND LARGE PRINT MAKE IT A GOOD VOLUME FOR A CHILD TO USE, WITH A PARENT'S HELP.

THIS BOOK IS MEANT FOR THE ABSOLUTE NOVICE, AND IT DOES AN ADMIRABLE JOB OF TEACHING THE FOREIGN LANGUAGE OF COMMODORE BASIC.

"THE ELEMENTARY COMMODORE 64" IS ALSO THE LATEST IN A LINE OF SIMILARLY-TITLED BOOKS. IT IS AN EXCELLENT WORK THAT SUFFERS FROM WHAT MIGHT BE TERMED A MAJOR PROBLEM - THE "MIGHT" DEPENDING ON WHICH VERSION OF THE 64 YOU OWN. THE SECOND REVISION (THE MAJORITY OF SALES) HAS AN INTERNAL SETUP THAT REQUIRES THE COLOR MEMORY TO BE POKED SEPARATELY FROM THE SCREEN MEMORY. IF YOU OWN THAT MACHINE, THE SCREEN-POKING CHAPTER JUST WON'T WORK FOR YOU BECAUSE THE AUTHOR WORKED WITH A PRE-RELEASE MODEL THAT DIDN'T NEED TWO POKES FOR ONE THING TO APPEAR.

THAT PROBLEM ASIDE, "ELEMENTARY" IS A WONDERFUL BOOK. BESIDES PROGRAMMING BASICS, IT COVERS CASSETTE, DRIVE, AND PRINTER USE. THE CHAPTERS ON SPRITE GRAPHICS AND SOUND ARE CLEAR, BUT BRIEF - OBVIOUSLY, SUCH TOPICS CAN'T BE COVERED THOROUGHLY IN WHAT PURPORTS TO BE AN ELEMENTARY BOOK.

THIS VOLUME IS ALSO AIMED AT THE COMPLETE NOVICE, BUT ASSUMES THE READER IS AT LEAST A YOUNG ADULT, AND MOVES AT A PRETTY BRISK PACE,

IF YOU KNOW NOTHING ABOUT PROGRAMMING, "I SPEAK BASIC" IS YOUR BEST BET; YOU CAN GRADUATE TO "ELEMENTARY" LATER. IF YOU HAVE A GRASP OF THE BASICS - LOOPS, ARRAYS, STRINGS, IF-THENS - AND WANT TO LEARN SOME OF THE 64'S OTHER TRICKS, GO STRAIGHT TO "THE ELEMENTARY COMMODORE 64".

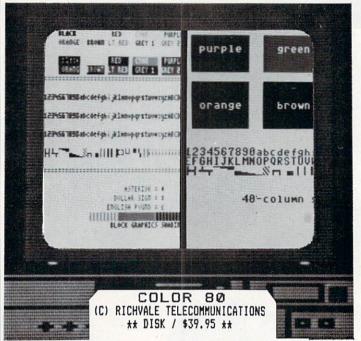
"I SPEAK BASIC TO MY COMMODORE 64" BY AUBREY B. JONES

HAYDEN BOOK COMPANY ROCHELLE PARK, NEW JERSEY

"THE ELEMENTARY COMMODORE 64"
BY WILLAIM SANDERS

DATAMOST, INC 8943 FULBRIGHT AVENUE CHATSWORTH, CA 91311 \$14.95

## <<<<< DOUBLE-TAKE >>>>>

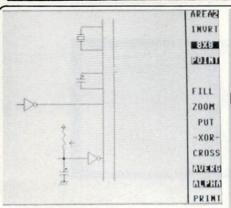


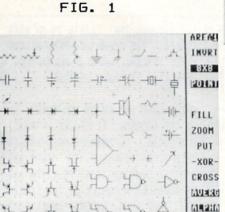
AVAILABLE FROM: BLUE SKY SOFTWARE ASHLAND OFFICE CENTER EVESHAM AND ALPHA AVENUES VOORHEES, NJ 08043 (609) 795-4025

\*\* NOTE: THE SCREEN-SPLITTING EFFECT SEEN HERE IS NOT POSSIBLE WITH SOFTWARE- WE DID IT WITH AN X-ACTO KNIFE.

COLOR 80 (LEFT SIDE OF 'SCREEN') GENERATES 80 COLUMNS OF CHARACTERS BY DRAWING THEM IN THE BIT-MAP MODE. USING NO BASIC RAM, MOST TEXT-BASED BASIC PROGRAMS WILL RUN, MOST OTHER PROGRAMS WILL NOT. THE CHARACTERS ARE READABLE ON A 1701/2 MONITOR (USED FOR THESE PHOTOS), BUT BARELY- (FORGET READING THEM AT ALL ON A STANDARD TV SET). SCROLLING IS VERY SLOW. ON THE RIGHT SIDE IS THE STANDARD 40 COLUMN DISPLAY FOR COMPARISON. COLOR 80 IS NOW BEING INCLUDED WITH MANY OF RICHVALE'S OTHER APPLICATIONS SOFTWARE, INCLUDING THEIR WORD-PROCESSOR- "SCRIPT 64": THIS IS COLOR 80'S BEST APPLICATION, WHERE THE 40 COLUMN MODE CAN BE USED FOR EYE-EASE, AND THEN THE 80-COLUMN MODE CAN BE SMITCHED IN FOR FORMAT VIEWING.

- EDITOR





PRINT

FIG. 2

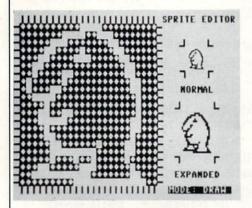


FIG. 3

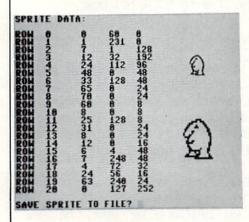
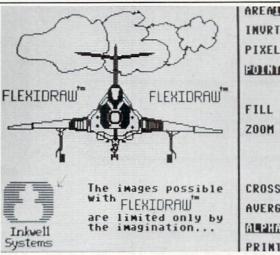


FIG. 4



AREAM IMURT PIXEL DOCK CROSS AUERG ALPHA



THE FLEXIDRAW SYSTEM FROM INKWELL IS A LIGHT-PEN BASED TOTAL DRAWING ENVIRONMENT WHICH HAS APPLICATIONS FOR ARTISTS, DESIGNERS, HOBBIESTS, PROGRAMMERS, AND OTHERS

NEEDING A TOP QUALITY HI-RES GRAPHICS INPUT AND EDITING SYSTEM.

THE FLEXIDRAW SYSTEM CONSISTS OF: A DT-170 LIGHT PEN ENCLOSED IN ANODIZED ALUMINUM WITH A NOSE OR TIP-SWITCH, A MASTER SOFTWARE DISK, FUNCTION KEY OVERLAY, AND MANUAL.

THE PEN IS INSTRUMENTATION QUALITY, COMFORTABLE TO HANDLE, AND A BREEZE TO INSTALL (SIMPLY PLUG INTO THE JOYSTICK PORT). THE MASTER DISK HAS THE MAIN DRAWING ROUTINES FOR USE WITH THE LIGHT PEN, AS WELL AS SAMPLE DRAWING LIBRARY, SYMBOL TEMPLATES, A SPRITE EDITOR/ANIMATOR, A MUSIC SYNTHESIZER PROGRAM, AND A PROGRAMMING MODE WHICH LETS THE USER ACCESS THE HI-RES DRAWING ROUTINES FROM BASIC.

FLEXIDRAW IS EASY TO USE DUE LARGELY TO THE SOPHISTICATED ON-SCREEN MENU SYSTEM (WHICH IS SIMILAR TO THOSE OF LARGE COMPUTER DRAFTING SYSTEMS). FUNCTIONS AND MODES ARE SELECTED BY TOUCHING THE PEN TO THE SCREEN MENU (SEE FIGS. 1,2,& 3). RESPONSE IS INSTANTANEOUS, AND HIDDEN MENU ITEMS APPEAR AS THEY BECOME NEEDED. USING THE MENU AND PEN RAPIDLY BECOMES AN EXTENSION OF THOUGHT, AND THIS IS ONE OF THE MAIN ATTRACTIONS OF THIS KIND OF DRAWING SYSTEM.

THE DRAWING SOFTWARE IS IN 320 X 200 BLACK & WHITE HI-RES BIT-MAP MODE. RESULT, THE MAXIMUM DETAIL IS ACCESSED. DRAWING FREE-HAND IS VERY SMOOTH AS A RESULT OF AN "AVERAGING" FUNCTION WHICH FILTERS OUT NOISE AND JITTER. SOME FUNCTIONS SUPPORTED INCLUDE: LINES, RUBBER-BAND, BLOCK MOVE (3 MODES), ZOOM, AUTO CIRCLES & BOXES, ETC. THE MOST POWERFUL FEATURE IS THE ABILITY TO USE A SET OF SYMBOLS (YOU CAN DESIGN YOUR OWN, OR USE THE ONES SUPPLIED) WHICH RESIDE ON A SECOND "PAGE", AND CAN BE MOVED TO A WORK SCREEN AND BE POSITIONED AND ADDED TO A DRAWING. (THE CIRCUIT IN FIG. 1 IS MADE THIS WAY WITH COMPONENTS FROM FIG. 2). DRAWINGS MAY BE DUMPED TO A WIDE RANGE OF GRAPHIC PRINTERS.

THE PROGRAMMING MODE LETS YOU WRITE ROUTINES THAT USE THE MACHINE LANGUAGE POWER OF FLEXIDRAW FROM BASIC.

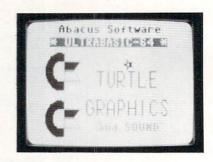
THE SPRITE EDITOR/ANIMATOR AND SYNTHESIZER ARE WELL-DONE EXTRA PROGRAMS THAT REALLY FILL OUT THE GENERAL APPEAL OF THIS PRODUCT (THERE CAN BE NO EASIER WAY TO EDIT SPRITES THAN WITH A LIGHT PEN! WE CREATED THE SPRITE IN FIG. 3 IN SECONDS.) SPRITES ARE AUTOMATICALLY CONVERTED TO DATA STATEMENTS (FIG. 4) AND CAN BE SAVED AS FILES.

FLEXIDRAW IS AN EXCELLENT PRODUCT, AND HELPS THE ESTABLISHMENT OF THE 64 AS A SERIOUS AND USEFUL TOOL. - FDITOR

FOR FURTHER INFORMATION, CONTACT:

INKWELL SYSTEMS PO BOX 85152 MB290 \$ 7760 VICKERS ST. SAN DIEGO, CA 92138 (619) 268-8792 \$149.00

# ULTRABASIC



CARLON ZARDETTO AKER

HAVING USED ABACUS' "SYNTHY-64", AND LOVED IT, I EXPECTED A LOT FROM ULTRABASIC 64. WHEN I SAW THAT ROY WAINWRIGHT HAD AUTHORED THIS PROGRAM (HE ALSO DID SYNTHY) MY EXPECTATIONS ROSE EVEN FURTHER. I WASN'T DISAPPOINTED!

ULTRABASIC PUTS 60 SOUND AND GRAPHICS COMMANDS AT YOUR DISPOSAL. IT HAS A TURTLE GRAPHICS SECTION, SPECIAL SPRITE-SPECIFIC COMMANDS, INPUT FUNCTIONS FOR JOYSTICK, PADDLE, AND LIGHTPENS. AND OTHER FUN ODDS AND ENDS TO LET YOU WRITE AN ENTIRE PROGRAM IN ULTRABASIC.

COMPARE THE NORMAL METHOD OF PUTTING YOUR 64 INTO HI-RES MODE WITH:

#### HIRES A.B

WHERE A AND B ARE THE SCREEN AND BORDER COLORS. AND, ASIDE FROM THE CONVENIENCE OF A BRIEF COMMAND INSTEAD OF A WHOLE POKEING PROGRAM, IN ULTRABASIC THE SWITCH TO HIRES ONLY TAKES AN INSTANT. (IF YOU HAVEN'T YET HAD THE PLEASURE OF SWITCHING TO HIRES IN COMMODORE BASIC, BELIEVE ME, ITS A SLOW PROCESS.)

IN HIRES MODE, AS YOU MIGHT GUESS, YOU CAN ADDRESS INDIVIDUAL PIXELS WITH THE GRAPHICS COMMANDS. THERE IS AN ALTERNATE "MULTI" (COLOR) MODE IN WHICH YOU ADDRESS BLOCKS OF FOUR PIXELS AT A TIME.

AS FOR THE COMMANDS THEMSELVES, YOU CAN DRAW A "CIRCLE" OR A "BOX" OR USE "BLOCK" FOR AN AUTOMATICALLY FILLED-IN BOX. "DOT" PLOTS A SINGLE PIXEL, WHILE "DRAW" LETS YOU PLOT A LINE. THE FORMAT FOR ALL THESE COMMANDS IS SIMILAR:

DRAW X1, Y1, X2, Y2, C

THE FIRST SET OF X-Y COORDINATES DEFINE THE STARTING POINT, THE NEXT SET THE END POINT, AND THE LAST NUMBER SETS THE COLOR. WHILE THESE COMMANDS ARE SHEER JOY AFTER COMMODORE BASIC, HAVING TO DEFINE THE COLOR WITH EVERY COMMAND DOES GET TEDIOUS. MOST GRAPHICS LANGUAGES ALLOW YOU TO SET THE COLOR SEPARATELY, AND IT REMAINS IN EFFECT UNTIL ANOTHER COLOR COMMAND IS ENCOUNTERED. MY FIRST REACTION WAS "OH WELL, BEGGARS CAN'T BE CHOOSERS"; BESIDES, THE PROBLEM IS ONLY A MINOR ANNOYANCE.

THERE IS ALSO A "FILL" COMMAND THAT PAINTS IN AN AREA THAT YOU HAVE ALREADY ENCLOSED. THE "CHAR" COMMAND ALLOWS YOU TO PRINT TEXT ON THE HIRES SCREEN; WHEN IN MULTI MODE, THIS HAS THE INTERESTING EFFECT OF ENLARGED LETTERS.

TURTLE IS A GRAPHIC LANGUAGE IN WHICH YOU GUIDE AN IMAGINARY TURTLE AROUND ON THE SCREEN; IT LEAVES A TRAIL, WHICH IS HOW YOU GET YOUR DRAWING. ULTRABASIC HAS CHANGED THE USUAL "PEN UP" AND "PEN DOWN" COMMANDS TO "TUP" AND "TDOWN". THERE ARE SEVEN OTHER COMMANDS THAT POSITION AND DIRECT THE TURTLE. THERE IS ACTUALLY A TURTLE ON THE SCREEN - A NICELY DESIGNED SPRITE THAT RUNS AROUND UNDER YOUR DIRECTION. THERE IS A COMMAND "BYE" THAT MAKES THE TURTLE DISAPPEAR, IN WHICH CASE YOUR PROGRAM RUNS SIGNIFICANTLY FASTER. YOU'LL WANT TO WORK IN THE BYE MODE WHEN YOU'RE DOING INTRICATE DESIGNS.

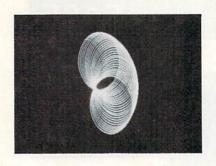
THE SPRITE GRAPHICS COMMANDS ARE NOT THE SIMPLEST THAT I'VE SEEN DESIGNED FOR THE 64, BUT, AGAIN, COMPARED TO COMMODORE BASIC...

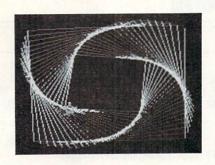
FIRST, SPRITES ARE DESIGNED IN ONE OF THREE WAYS: "BIT", "HEX", OR "SDATA". EACH REFERS TO THE BINARY DESIGN OF THE SPRITE, BUT "BIT" ACTUALLY WORKS WITH THE PATTERN OF ONES AND ZEROS WHILE "HEX" AND "SDATA" USE HEXADECIMAL AND DECIMAL NUMBERS. WHILE THE BIT METHOD TAKES LONGER TO TYPE IN, IT HAS THE ADVANTAGE OF ALLOWING YOU TO SEE THE ACTUAL SPRITE PATTERN AS YOU ARE DESIGNING IT. SPRITE MOVEMENT IS EASY WITH "PLACE" AND FUN WITH "ROTATE" (TO TURN IT NINETY DEGREES), BUT GETTING IT ON THE SCREEN IS A CHORE:

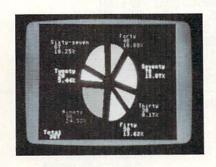
SPRITE N,S,M,P,X,Y,C1,C2,C3

ARGUMENTS FOR THE SPRITE COMMAND REFER TO THE SPRITE PRIORITY, SPRITE NUMBER, MODE (HIRES OR MULTICOLOR), BACKGROUND PRIORITY, VERTICAL AND HORIZONTAL EXPANSION, AND COLORS. IT'S A LOT OF DATA TO CONSIDER, BUT WORTH THE EFFORT. THERE ARE SPRITE COLLISION DETECTION COMMANDS AND. BY THE WAY, SIXTEEN SPRITES ARE AVAILABLE.

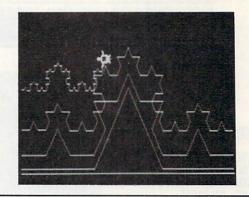
YOU'LL LOVE BEING FINALLY ABLE TO GET AT YOUR 64'S SOUND CAPABILITES. THE "SOUND" COMMAND LETS YOU SPECIFY THE GENERATOR, PITCH, AND DURATION OF THE SOUND. THE THREE GENERATORS ARE PRE-SET TO DIFFERENT WAVEFORMS, BUT YOU CAN











RE-SET THEM WITH THE "GEN" COMMAND. YOU WILL BE POSITIVELY AMAZED WHEN YOU CAN PLAY A TUNE WITH ONLY A FEW SHORT PROGRAM LINES AND NO POKES. SOUND EFFECTS ARE EASY TO EXPERIMENT WITH AND YOU'LL FINALLY GET A FEEL FOR JUST WHAT A CHANGE IN THE WAVEFORM DOES FOR A SOUND.

THERE IS ANOTHER TYPE OF SOUND COMMAND, CALLED "TUNE".
THIS METHOD HAS THE ADVANTAGE OF BEING ABLE TO SET A TUNE
GOING THAT WILL PLAY WHILE THE REST OF YOUR PROGRAM
CONTINUES. IT HAS THE DISADVANTAGE OF NEEDING ITS
CONSIDERABLE AMOUNT OF DATA ENTERED IN HEXADECIMAL CODE.

ULTRABASIC IS, OF COURSE, WRITTEN IN MACHIME LANGUAGE.
ONCE IT IS LOADED INTO MEMORY, YOU CAN SAVE AND LOAD YOUR
OWN PROGRAMS WITHOUT AFFECTING ITS STORAGE. THIS MEANS, OF
COURSE, THAT ANY PROGRAM YOU WRITE IN ULTRABASIC CAN'T BE
RUN UNTIL THE ULTRABASIC PROGRAM IS LOADED FIRST.
PERSONALLY, I FIND THE NECESSITY FOR DOUBLE LOADS ANNOYING,
AND WOULD MUCH RATHER SEE A SYSTEM WHERE THE MACHINE CODE
IS SAVED ALONG WITH MY OWN PROGRAM. A PIPE DREAM, OF
COURSE, BECAUSE THAT WOULD MAKE ULTRABASIC COPYABLE, AND NO
ONE TRUSTS HOME PROGRAMMERS. (NOR SHOULD THEY, I SUPPOSE.)

ALTHOUGH YOU CAN WRITE TEXT ON THE HIRES AND MULTI COLOR SCREENS, YOU CAN ALSO SWITCH TO A REGULAR TEXT MODE. THIS CAN BE DONE WITHIN A PROGRAM, OR JUST BY USING THE F5 KEY TO SWITCH FROM ONE TO THE OTHER.

THE DOCUMENTATION IS THOROUGH, AND REASONABLY CLEAR.

IT IS THE KIND OF MANUAL THAT GETS CLEARER ON EACH READING,
AND MAKES THE MOST SENSE AFTER YOU'VE HAD SOME EXPERIENCE
WITH THE PROGRAM.

ULTRABASIC PUTS INTO YOUR 64 WHAT COMMODORE LEFT OUT: A 600D GRAPHICS/SOUND LANGUAGE. WHILE SOME OF IT FEATURES ARE NOT AS SIMPLE TO USE AS THE COMMANDS IN OTHER GRAPHICS LANGUAGES, GETTING ALL OF THIS IN ONE PACKAGE IS A BARGAIN.

> ULTRABASIC 64 IS AVAILABLE FROM: ABACUS SOFTWARE POST OFFICE BOX 7211 GRAND RAPIDS, MICHIGAN 49510 (DISK 42.95, TAPE 39.95)

# FACE TO FACE

ARBY FULLER

#### THE HOME ACCOUNTANT

\$79.95 - DISKETTE CONTINENTAL SOFTWARE 11223 SOUTH HINDRY AVENUE LOS ANGELES, CA 90045 (213) 417-8031 (213) 417-3003





#### COMPLETE PERSONAL ACCOUNTANT

(FORMERLY 'COLOR ACCOUNTANT') \$79.95 - DISKETTE PROGRAMMER'S INSTITUTE P.O. BOX 3470, DEPT. C CHAPEL HILL, NC 27514 (800) 334-SOFT

#### INTRODUCTION

THE CONSUMER IS OFTEN PRESENTED WITH TWO OR MORE WELL-PUBLICIZED PRODUCTS FROM DIFFERENT COMPANIES WHICH APPEAR TO OFFER SIMILAR FEATURES AT SIMILAR PRICES. IN 'FACE TO FACE', INFO-64 WILL ATTEMPT TO COMPARE PRODUCTS OF THIS NATURE TO HELP THE PROSPECTIVE BUYER IN SELECTING THE PACKAGE WHICH BEST MEETS HIS/HER NEEDS. THE OBJECT HERE IS NOT NECESSARILY TO FIND A 'WINNER': OFTEN TWO PRODUCTS WILL BOTH BE VERY GOOD, EACH APPEALING TO DIFFERENT AUDIENCES. THE IDEA IS TO HELP YOU FIND THE RIGHT PRODUCT BOTH FOR YOUR INDIVIDUAL NEEDS AND PERSONAL TASTE.

THE TWO PACKAGES COMPARED HERE ARE BOTH FROM ESTABLISHED SOFTWARE HOUSES & ARE INTENDED TO HELP MANAGE PERSONAL BUDGETS, MAINTAIN & BALANCE CHECKBOOKS, AND GENERATE REPORTS AND GRAPHS THAT WILL CLARIFY YOUR FINANCIAL SITUATION.

#### SPECIFICATIONS

NUMBER OF CHECKBOOKS: 5
BUDGET CATEGORIES: 100
ELAG TRANSACTIONS: TAY

FLAG TRANSACTIONS: TAX DEDUCTIBLES
MAXIMUM TRANSACTION: \$999.999.99
AUTOMATIC TRANSACTIONS: 5 PER CHECKBOOK
TRANSACTIONS PER DISK: 1000 (APPROX.)

LINK DISKETTES: YES
CASH & CREDIT CARDS: YES
MEMO LINE FOR CHECKS: YES
SPLIT CHECKS/DEPOSITS: YES
PRINT CHECKS: YES

FIND TRANSACTIONS BY: DATE

CHECK# PAYEE AMOUNT

BUDGET CATEGORY

MEMO Tax Flag

ANY COMBINATION OF ABOVE

REPORTS: BUDGET

**ACTUAL EXPENSE** 

BALANCE SHEET/NET WORTH

INCOME/EXPENSE

CHECK ACTIVITY SORTED BY ANY FIELD ALL TRANSACTIONS TO DATE, SORTED BY

ANY FIELD

GRAPHS: # BUDGET VS. ACTUAL

ALL GRAPHS ARE FOR A 12-MO. PERIOD, & SHOW FROM 1 TO 3 CATEGORIES. # EXPENSE

# TREND

CHILDUNILS.

#### ADDITIONAL FEATURES

# SUPPORTS 1 OR 2 DRIVES / SET-UPS FOR MOST PRINTERS

NUMBER OF CHECKBOOKS: 10

BUDGET CATEGORIES: 99 (+ 350 SUB-CATEGORIES)
FLAG TRANSACTIONS: TAX DEDUCTIBLES & USER-DEFINED

MAXIMUM TRANSACTION: \$9,999,999.99
AUTOMATIC TRANSACTIONS: NO LIMIT

TRANSACTIONS PER DISK: 2700 (APPROX.)

LINK DISKETTES: NO
CASH & CREDIT CARDS: YES
MEMO LINE FOR CHECKS: NO
SPLIT CHECKS/DEPOSITS: YES
PRINT CHECKS: YES

FIND TRANSACTIONS BY:

IONS BY: DATE CHECK# PAYEE

AMOUNT ACCOUNT NUMBER SUB-ACCOUNT NUMBER TAX OR USER FLAGS

REPORTS: BUDGET VS. ACTUAL WITH DIFFERENCE.

BALANCE SHEET/NET WORTH

INCOME/EXPENSE

CHECK ACTIVITY (RANGE OF MONTHS) ALL TRANSACTIONS TO DATE, SORTED

BY ANY FIELD

GRAPHS: # BUDGET VS. ACTUAL

SINGLE MONTH & SHOW ALL ACCOUNTS IN THAT CATEGORY.

ALL GRAPHS ARE FOR A | \$ EXPENSE/INCOME/ASSETS/LIABILITIES

# ALL ACCOUNTS

#### ADDITIONAL FEATURES

# 1200-NAME MAILING LIST

\$ 200-ENTRY PAYMENT CALENDAR

**\$ 250-ENTRY APPOINTMENT CALENDAR** 

#### \$\$ THE HOME ACCOUNTANT \$\$

#### GENERAL

#### **\*\* COMPLETE PERSONAL ACCOUNTANT \*\***

THE HOME ACCOUNTANT? IS BUILT AROUND A BUDGET STRUCTURE DIVIDED INTO 5 BASIC CATEGORIES: ASSETS, CREDIT CARDS, LIABLILITIES, INCOME, & EXPENSES. ALL TRANSACTIONS AND BUDGET ACCOUNTS ARE ASSIGNED TO ONE OF THE ABOVE CATEGORIES. THIS FACILITATES THE PROPER APPLICATION OF CREDITS AND DEBITS BETMEEN DIFFERENT TYPES OF ACCOUNTS. THE START-UP IS LENGTHY, AS THE COMPLETE SYSTEM MUST BE STEPPED THRU AND SET-UP IN THE PROPER SEQUENCE- THE SOFTWARE DOES NOT ALLOW YOU TO SKIP ANY STEPS OR EVEN TRY TO EXPERIMENT WITH REPORTS OR GRAPHS UNTIL THE GROUNDWORK IS DONE. THIS IS A VERY GOOD IDEA & INSURES SYSTEM INTEGRITY.

TRANSACTIONS ARE ENTERED THRU 3 SIMILAR BUT SEPARATE SCREENS: CHECKBOOK, CREDIT CARD, & CASH. FIRST, THE PROPER CATEGORY FOR THE TRANSACTION IS INDICATED, THEN THE BLANKS FOR DATA ARE FILLED IN SEQUENTIALLY. EDITING IS POSSIBLE (ONCE ALL FIELDS HAVE BEEN RESPONDED TO) BY TYPING THE FIELD NUMBER AND THEN RE-TYPING THE NEW INFORMATION. CHECKBOOK RECONCILIATION IS ACCOMPLISHED WITH THE SAME SCREEN-LAYOUT & YOU ARE ASKED TO CANCEL OR PASS EACH CHECK OR DEPOSIT IN TURN.

TRANSACTIONS WHICH ARE MADE EVERY MONTH (MORTGAGE, LOANS, ETC.)
MAY BE PAID AUTOMATICALLY BY SETTING THEM UP IN A SPECIAL FILEEVERY TIME A NEW MONTH IS STARTED, ALL AUTOMATIC TRANSACTIONS
WILL TAKE PLACE WITHOUT FURTHER USER-INTERVENTION. (YOU MAY
NOT WISH TO PAY MID-MONTH BILLS THIS WAY SINCE THEY WILL BE
FIGURED IN AT THE BEGINNING OF THE MONTH.)

ONCE YOU HAVE THE SYSTEM SET UP AND A MONTH OR TWO OF CHECKS AND PAYMENTS PROCESSED, YOU WILL BE ABLE TO BEGIN GETTING A PICTURE OF YOUR FISCAL CONDITION VIA THE REPORT AND GRAPHING SECTIONS; THIS IS THE PAY-OFF FOR ALL YOUR HOURS OF CONSCIENCIOUS KEYBOARD TAPPING.

#### ====== COMMENTS ======

THERE'S 600D NEWS AND BAD NEWS. ON THE PLUS SIDE, WE LIKE THE SEARCH FEATURE VERY MUCH: LETS SAY YOU GET TO THE CATEGORY FIELD OF A TRANSACTION SCREEN AND YOU WANT TO ENTER THE CATEGORY- 'INTEREST, CAR LOAN'...YOU KNOW YOU SET THIS ITEM UP IN THE BUDGET, BUT YOU DON'T KNOW IF YOU CALLED IT 'INT.-AUTO', OR 'INTEREST, CAR', OR WHAT- INSTEAD OF LOOKING IT UP FROM YOUR BUDGET PRINTOUT, YOU CAN JUST TYPE "INT" & THE FIELD WILL AUTOMATICALLY SHOW THE FIRST ITEM FROM YOUR BUDGET THAT MATHCES THESE LETTERS- IF IT SAYS "INTEREST, APPLE FUND" YOU JUST HIT THE SPACE BAR TO GET THE NEXT MATCH, AND THEN HIT RETURN WHEN YOU FIND THE RIGHT ONE. THIS IS A GREAT FEATURE FOR ANY PROGRAM OF THIS TYPE AND A REAL TIME-SAVER.

UNFORTUNATELY, THE TIME SAVED WITH THE FIELD SEARCH DOES NOT BEGIN TO MAKE UP FOR THE TIME LOST PROCESSING TRANSACTIONS AND RECONCILING CHECKBOOKS. EACH TRANSACTION OR RECONCILED CHECK REQUIRES AN AVERAGE OF 1 1/2 MINUTES TO BE UPDATED TO THE DISK, AND MUST BE DONE PER ITEM (NOT AS A BATCH). THIS MEANS THAT IF YOU SIT DOWN TO BALANCE YOUR CHECKBOOK AND HAVE 50 CHECKS TO RECONCILE FOR THE MONTH (NOT AN UNCOMMON AMOUNT) YOU WILL SPEND ABOUT AN HOUR AND FIFTEEN MINUTES WAITING (THIS DOES NOT INCLUDE YOUR ACTIVE TIME OF TYPING AND THINKING) DURING WHICH YOU WILL NOT GET MUCH ELSE DONE BECAUSE EVERY MINUTE AND A HALF YOU WILL NEED TO ENTER THE NEXT TRANSACTION. THIS IS NOT OUR IDEA OF COMPUTER HELP, IT IS MORE LIKE COMPUTER TORTURE! THERE ARE ALSO PROBLEMS WITH THE AUTOMATIC FIELD-ENTRY ROUTINES DURING SPLIT AND SAME-DATE TRANSACTIONS, BUT THESE PALE NEXT TO THE SPEED PROBLEM.

IN THE 'COMPLETE PERSONAL ACCOUNTANT' (CPA FOR SHORT), ALL FINANCIAL FUNCTIONS ARE BASED ON A CHART OF NUMBERED ACCOUNTS (DIFFERENT RANGES OF ACCOUNT NUMBERS DETERMINE WHETHER THE ACCOUNT IS AN ASSET, LIABILITY, EQUITY, INCOME, OR EXPENSE). YOU CAN SPEND SOME TIME (SEVERAL HOURS) SETTING UP YOUR OWN, OR YOU CAN USE THE ONE PROVIDED ON THE DISK (AS-IS, OR CUSTOMIZED TO YOUR NEEDS).

ONCE ACCOUNTS ARE SET UP, ALL TRANSACTIONS (CHECKS, DEPOSITS, CASH, BANK CARDS, CREDIT CARDS, PHONE-PAYMENTS, RECONCILIATION, ETC.) ARE MADE VIA THE CHECKBOOK MAINTENANCE SCREEN. IN ROUTINE USE, DATA FROM YOUR CHECKBOOK IS PERIODICALLY TRANSFERED TO THE COMPUTER VIA THE CHECKBOOK SCREEN, ASSIGNING EACH TRANSACTION TO ITS APPROPRIATE ACCOUNT. YOU MAY UPDATE THIS ELECTRONIC CHECKBOOK AS OFTEN AS YOU LIKE, THO MANY OF US WILL CHOOSE TO DO IT ALL EACH TIME A BANK STATEMENT IS RECEIVED. TAX DEDUCTIBLES, CASH, & CREDIT TRANSACTIONS CAN BE FLAGGED AND ARE HANDLED IN THIS SINGLE ENVIRONMENT. EDITING TRANSACTIONS SIMPLY INVOLVES SCROLLING FORWARD OR BACK THRU YOUR CHECKBOOK AND TYPING OVER FIELDS NEEDING CORRECTION WHEN LOCATED.

TRANSACTIONS THAT OCCUR REGULARLY CAN BE HANDLED CONVENIENTLY WITH THE AUTOMATIC CHECK ENTRY FEATURE. MASTER CHECKS FOR THESE TRANSACTIONS ARE STORED IN A SEPARATE FILE WHERE THEY CAN BE BROWSED FOR AND INSERTED INTO CHECK-MAINTENANCE AND THEN EDITED TO REFLECT THE CURRENT DATE. THIS IS A CONVENIENT WAY TO AVOID FORGETTING A REGULAR BILL, AND CONTRIBUTES TO THE ACCURACY OF THESE IMPORTANT TRANSACTIONS.

ONCE YOU HAVE YOUR STATEMENT AND HAVE BROUGHT YOUR TRANSACTIONS UP TO DATE, YOU ARE READY TO RECONCILE YOUR CHECKBOOK (USING THE SAME FAMILIAR SCREEN) - TRANSACTIONS WILL APPEAR IN SEQUENCE, AND YOU MAY CANCEL OR SKIP EACH ONE IN TURN.

NEXT YOU WILL NEED TO BUILD YOUR BUDGET FILES; THIS IS FAIRLY STRAIGHTFORWARD AND PROVIDES THE BASIS FOR MOST OF THE ANALYSIS TO BE DONE BY THE REST OF THE PACKAGE.

UPON COMPLETION OF THESE NECESSARY CHORES, YOU MAY GENERATE ANY OF THE AVAILABLE REPORTS OR GRAPHS AND ANALYZE YOUR SITUATION/PREDICAMENT. IT IS ONLY AT THIS POINT THAT THE USEFULNESS OF ELECTRONIC FINANCIAL MANAGEMENT FINALLY COMES INTO VIEW.

#### ======= COMMENTS =======

WE LIKE THE PICTORIAL FORMAT OF THE TRANSACTION SCREEN. TRANSACTIONS ARE RELATIVELY FAST (ABOUT 6 SECONDS TO UPDATE TO DISK) AND ARE DONE AS YOU GO SO AS NOT TO RISK LOSING WORK. ALL OTHER FUNCTIONS (FINANCIAL STATEMENTS, BUDGET ANALYSIS, ETC.) REQUIRE LOADING MULTIPLE FILES PRIOR TO A SESSION, & THEN SAVING THE UPDATED FILES MANUALLY AFTER THE SESSION.

HAVING TO LOAD AND SAVE DATA FILES MANUALLY IS BOTHERSOME, UNNECESSARY, AND (IN THE EVENT OF FORGETTING TO SAVE) CAPABLE OF DESTROYING AN EVENING'S WORK. THIS FEATURE IS OUR ONLY REAL COMPLAINT WITH 'COMPLETE PERSONAL ACCOUNTANT', AND WE HOPE ITS CREATORS WILL REMEDY THIS IN FUTURE UPDATES.

ONE OTHER MINOR IRRITATION IS A LACK OF CONSISTENCY IN THE WAY THE USER MUST ENTER DATES. IN SOME PLACES THE DATES ARE ENTERED 6 DIGITS ALL AT ONCE (011583) WITH THE PROGRAM INSERTING SLASHES AFTER 'RETURN' IS HIT- IN OTHER PLACES PAIRS OF DIGITS MUST BE FOLLOWED BY 'RETURN' BEFORE THE NEXT PAIR WILL BE ACCEPTED: ISN'T LIFE COMPLICATED ENOUGH ALREADY?

#### CONTINUED ..

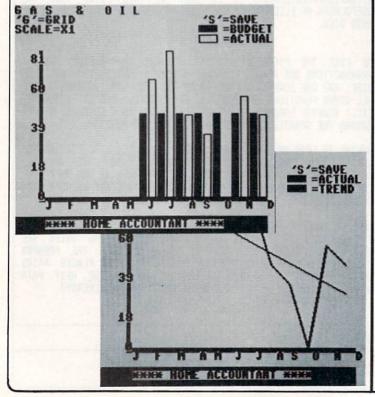


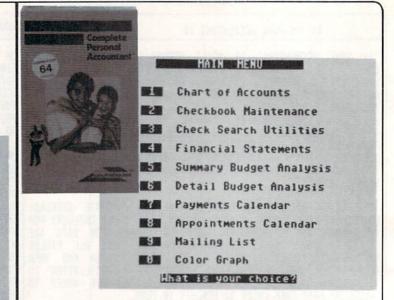
\*\* HOME ACCOUNTANT \*\* Bild CBilche

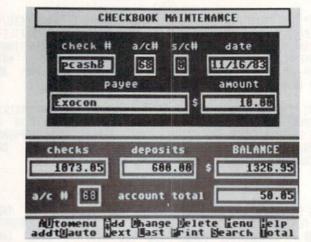
TRANSACTIONS
GRAPHS
PRINTED REPORTS
PRINT CHECKS/ACTIVITY REPORT
BUDGET
EXTEND DATA DISK
START NEW YEAR
HARDWARE/START NEW SYSTEM
EXIT

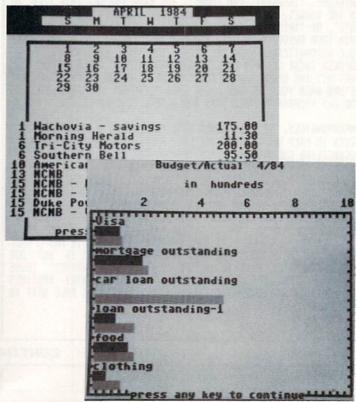
ENTER SELECTION (1-9) M

\*\* HOME ACCOUNTANT \*\*
| MINORIDUS
| SAMPLE DEC 1983
| FIRST NATIONAL 1)MHDM3 2)DEPOSIT 3)EMD 12/87/83 (M)MODE 3848 EXOCON GIL 27.58 6ASOLINE 6AS & GIL TRANSH>> 64 BALANCE 472.56 LETTER TO CHANGE(A-H)
L (P)PRINT (R)RECORD
ENTER SELECTION (X) CANCEL









#### \*\* THE HOME ACCOUNTANT \*\*

#### REPORTS

#### \*\* COMPLETE PERSONAL ACCOUNTANT \*\*

'HOME ACCOUNTANT' GENERATES NUMEROUS TYPES OF REPORTS (SEE SPECIFICATIONS): THESE ARE LIKELY THE MOST USEFUL DUTPUT FROM ANY GOOD ACCOUNTING PROGRAM. WE LIKE THE PROVISIONS MADE FOR INTERFACING THE PROGRAM TO A VARIETY OF PRINTERS. WE ALSO LIKE THE 12-MONTH, 132-COLUMN DUTPUT WHICH IS NECESSARY TO GET THE WHOLE YEAR'S PICTURE ACROSS ONE PAGE. WHAT COMMODORE 1525-OWNERS WILL NOT LIKE IS THAT THE 132 COLUMNS IS NOT AN OPTION, IT IS MANDATORY, AND ON THEIR 80-COLUMN MACHINES THEY WILL GET CONSIDERABLE WRAP-AROUND WHICH WILL MAKE THEIR HARDCOPY LESS THAN PRETTY.

'CPA' PRINTS THE WHOLE RANGE OF FINANCIAL REPORTS, WITH AN ESPECIALLY GOOD DETAILED BUDGET ANALYSIS. ALSO PRINTABLE ARE THE APPOINTMENT AND PAYMENT CALENDARS AS WELL AS MAILING LABELS FROM THE BUILT-IN MAILING-LIST PROGRAM. NO SPECIAL PROVISIONS ARE MADE FOR ACCOMODATING NON-COMMODORE PRINTERS, THO PROPERLY INTERFACED ASCII PRINTERS WILL WORK. AS YOU MIGHT EXPECT, ONLY BO-COLUMN OUTPUT IS SUPPORTED: FOR THE ANNUAL SPREAD YOU WILL NEED SOME SCOTCH TAPE.

#### **GRAPHS & OTHER FEATURES**

'HOME ACCOUNTANT' PROVIDES FOR THREE KINDS OF GRAPHS: 1) A BAR GRAPH FOR SHOWING BUDGET VS. ACTUAL AMOUNTS. 2) A LINE GRAPH FOR CHARTING UP TO 3 ACCOUNTS AT ONE TIME. 3) A TREND GRAPH WHICH SHOWS THE ACTIVITY OF ONE ACCOUNT ALONG WITH A STRAIGHT "TREND" LINE. THESE GRAPHS COVER A 12-MONTH PERIOD, ARE SELF-SCALING, AND HAVE AN OPTIONAL GRID WHICH CAN BE DRAWN OVER THE GRAPH. IN THE PROCESS OF CONVERTING THIS FROM THE APPLE VERSION, THE COLOR GOT LOST, AND ALL GRAPHICS ARE BLACK & WHITE (THIS CAN MAKE THE TRIPLE LINE-GRAPHS CONFUSING- THE COLOR IS NOW SCHEDULED FOR A FUTURE UPDATE.)

HARD COPY IS ONLY AVAILABLE VIA. 3RD-PARTY SOFTWARE.

CPA IS CAPABLE OF PRODUCING BAR GRAPHS FOR MOST OF ITS FUNCTIONS. DATA FROM YOUR VARIOUS FILES IS USED TO DRAW THE GRAPHS ON THE SCREEN (OR TO A PRINTER- SEE BELOW). THE GRAPHS ARE AUTOMATICALLY SCALED, AND SPREAD OVER SEVERAL SCREENS IF MORE DATA HAS BEEN CALLED THAN CAN BE DISPLAYED AT ONCE. THE MOST USEFUL GRAPH IS THE BUDGET VS. ACTUAL GRAPH (SEE PHOTOS). UNFORTUNATELY CPA IS ONLY DESIGNED TO SHOW ONE MONTH AT A TIME: WE FEEL THAT A TWELVE-MONTH SPREAD WOULD HAVE BEEN MUCH MORE HELPFUL.

IF YOU WANT A HARD COPY, YOU HAVE TWO CHOICES: WITH A COMMODORE GRAPHICS PRINTER, YOU SIMPLY PUSH THE APPROPRIATE MENU KEY AND YOU SET YOUR PRINTOUT- OTHER GRAPHICS PRINTERS WILL REQUIRE AN EXTRA SCREEN-DUMP ROUTINE (NOT INCLUDED).

THREE ADDITIONAL PROGRAMS ARE INCLUDED ON THIS DISK: 2 ON-SCREEN CALENDARS ASSIST IN KEEPING TRACK OF APPOINTMENTS AND PAYMENT DATES, AND A 1200-NAME MAILING LIST PROGRAM ADDS EXTRA VALUE (IF YOU NEED A MAILING-LIST PROGRAM).

ONE OTHER BONUS DESERVES MENTION: THE FLIP SIDE OF THIS DISK HAS A SELF-RUNNING INSTRUCTIONAL DEMO ON IT THAT SHOWS OFF THE FEATURES OF THIS PACKAGE.

#### SUMMARY

IT IS CLEAR THAT THE CREATORS OF 'THE HOME ACCOUNTANT' ARE SKILLED AND CAPABLE DESIGNERS WHO HAVE PUT A LOT OF EFFORT INTO A HOME ACCOUNTING CONCEPT, & INDEED, THIS PACKAGE HAS BEEN HIGHLY PRAISED IN ITS APPLE FORMAT. IT IS EQUALLY CLEAR THAT IN THEIR EAGERNESS TO GET THE 64 VERSION TO MARKET, CONTINENTAL SOFTWARE HAS DONE A HATCHET-JOB ON THEIR OWN PRODUCT (THE VERSION WE TESTED HAD SEVERAL OTHER SERIOUS PROBLEMS THAT ARE NOT DETAILED HERE, AS WE HAVE BEEN ASSURED THAT THEY HAVE SINCE BEEN CORRECTED).

WHILE WE HAVE NO DOUBT THAT CONTINENTAL WILL EVENTUALLY BRING THIS PRODUCT UP TO SNUFF, IN ITS PRESENT FORM WE CANNOT RECOMMEND THAT ANYONE TRY TO USE 'THE HOME ACCOUNTANT' FOR THE COMMODORE 64. FURTHERMORE, WE FEEL THAT CONTINENTAL SHOULD WITHDRAW THE CURRENT VERSION FROM THE MARKET AND OFFER REFUNDS OR CREDIT TO PERSONS WHO HAVE ALREADY PURCHASED 'THE HOME ACCOUNTANT'- AT THE VERY LEAST THEY SHOULD DROP THE \$20 CHARGE REQUIRED FOR UPDATED VERSIONS.

INSPITE OF A COUPLE OF ROUGH SPOTS AND THE REGRETTABLE NECESSITY TO HANDLE SEVERAL DATA FILES MANUALLY, THE 'COMPLETE PERSONAL ACCOUNTANT' IS DEFINITELY A WORTHWHILE AND QUALITY PRODUCT PROVIDING A COMPREHENSIVE SYSTEM FOR HOME MONEY MANAGEMENT. IF YOUR FINANCES ARE FAIRLY SIMPLE, IT MAY BE OVERKILL: IF, HOWEVER, YOU TEND TO GET LOST IN YOUR STACK OF BILLS, RECEIPTS, & STATEMENTS, THIS PACKAGE WIL BE A GOOD INVESTMENT.

TWO NEW PROGRAMS FROM PROGRAMMER'S INSTITUTE (A SPREADSHEET & AN INCOME TAX PACKAGE) ARE SCHEDULED FOR RELEASE THAT ARE INTENDED TO SHARE DATA WITH CPA AND MAKE FURTHER USE OF YOUR INFORMATION. IN ADDITION, SUBSETS OF CPA ARE AVAILABLE SEPERATELY IF YOU NEED ONLY SOME OF THE FUNCTIONS DESCRIBED HERE.

4 POKE 53281,15:POKE53280,0:POKE53269,0:PRINT"(SC)":POKE54296,0:K=0

5 FORI=1T025: PRINT\*(GN)(RV) (RO)(CR) (CR)

{RO} ":: NEXT

6 PRINT"

(NH)++++++++++++++START+++++++++(CU)(CU)"

10 POKE 53265. PEEK (53265) AND 247

15 V=53248:POKE2042,13:FORN=0T063:READQ:POKE832+N,Q:NEXT:X=187

20 POKE V+4, X: POKEV+5, 0: POKEV+41,0

25 POKEV+42,4 :POKE2043,195:FORN=OTD63:READQ:POKE12480+N,Q:NEXT:POKEV+6,X

26 S=54272: FORL=0T024: POKES+L, 0: NEXT: POKES+24, 15: POKES+6, 240: POKES+3, 1

27 POKES+4.65: F=600: H=INT (F/256): L=F-H\$256: POKES. L: POKES+1. H

30 POKE V+7,0:POKEV+21,12\*FOR P=125T0385:POKEV+5,P/5 :POKEV+7,P/5:NEXT:R=3000

35 FORT=1T02:FORF=200TORSTEPF^1.2/10:H=INT(F/256):L=F-H\$256:POKES.L:POKES+1.H

36 NEXT: R=2\*R: NEXTT

38 POKES+7, 224: POKES+8, 46: POKES+12, 26: POKES+14, 200: POKES+19, 26

40 POKES+1, 10: F=0: POKES, F

46 POKE1206.225; POKE1204.225; POKE55476.11; POKE55478.11 ; POKES+11.33; POKES+18.21

50 POKE211.18:A=18

88 PRINT" (CU)"

90 60SUB300

94 IFF<220THENF=F+8 :POKES,F

95 PRINT"(6N) (RV)

96 IFTI>U+3600THENPOKE211, A: PRINT" (WH) {CL) {CL} {CL} {CL} +++++FINISH+++++": 60T0400

97 K=K+1

100 DN(INT (RND(0) \$3 )) 50TO 110,120:50TD130

110 IFPEEK (1930) = 32 THENGOTO125

115 GOSUB300: A=A+1: POKE211, A: PRINT (CL) (RV) f (RO) f": 60T0140

120 IFPEEK (1905) = 32 THENGOTO115

125 GDSUB300: A=A-1: POKE211. A: PRINT \*\* {RV}\*(RD) \*: GOTD140

": 60T0140 130 GOSUB300: POKE211, A: PRINT"

140 GDSUB300

144 IFF<240THENF=F+8 : POKES, F

145 IFPEEK (53279) > OTHENPOKE 1063, 81: K=K-5: F=0: FORP=OTD100: NEXT

150 GOT090

300 J=PEEK (56320): J=(15-(JAND15))/4: DNJ6DTD310,320

305 IFK>1THENPOKES+11,0:POKES+18,0:RETURN

306 RETURN

310 X=X-2:POKE V+4.X:POKEV+6.X:F=0:POKES+11.33:POKES+18.21:RETURN

320 X=X+2:POKE V+4, X:POKEV+6, X:F=0:POKES+11, 33:POKES+18, 21:RETURN

400 FORE=1T021:PRINT:60SUB300:FORW=1T025:NEXTW:60SUB300:FORW=1T025:NEXT:60SUB300

410 NEXTE: POKES+1, 1: N=1 : FORP=83 TO500: POKEV+5, P/N: POKEV+7, P/N: N=N+.006

420 NEXT: POKES+24.0: PRINT (CU) (CU) (CU) (CU) (CU) (CU) (CU) SCORE :: PRINTK \$49

425 PRINT"(CD)(CD)PRESS ANY KEY TO RESTART"

430 GETA\$: IFA\$=""THEN430

440 RUN4

500 DATA 0,0,0,60,1,224,60,1,224,60,1,224,60,1,224,62,3,224,60,1,224,60,1

510 DATA 224,60,1,224,60,1,224,0,112,0,0,112,0,0,112,0,0,112,0,0,32,0,0,0,0,14

520 DATA 3,128,14,3,128,15,7,128,14,3,128,14,3,128,0,

550 DATA, 0, 0, 248, 0, 1, 252, 0, 1, 252, 0, 1, 252, 0, 1, 252, 0, 1, 252, 0, 1, 252, 0, 1, 252, 0

560 DATA 1,140,0,1,140,0,1,140,0,1,140,0,1,220,0,0,248,0,0,248,0,0,248,0,0,248

570 DATA 0,0,248,0,0,248,0,0,112,0,0,0,0

IN "CRASH", HANS GRAGE HAS PUT TOGETHER A PROGRAM WHICH CAN BE QUICKLY TYPED (FOR THOSE OF US WITH SHORT ATTENTION SPANS AT THE KEYBOARD) & WHICH ENCOMPASSES A NUMBER OF THE 64'S FEATURES INCLUDING SPRITES, SOUND, ANIMATION, JOYSTICK CONTROL, COLLISION PROCESSING, SCROLLING, RANDOM NUMBERS, AND MORE.

WHILE NOT LIKELY TO DIMINISH SALES OF "MOTOR MANIA", "CRASH" IS A GREAT THE LEARNING VEHICLE FOR NOVICE PROGRAMMER, AND A GOOD STARTING PLACE FOR A COMPLETE SAME. 60 AHEAD: CHANGE THE SOUND, COLORS, SPEED, SHAPES, -ADD EXPLOSIONS & HAZARDS OF YOUR OWN DESIGN. IN FACT, SEND US A COPY WHEN YOUR DONE & IF IT'S ANY GOOD, WE MAY EVEN PUBLISH IT HERE IN A FUTURE ISSUE!

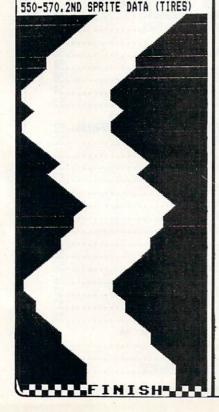


(CRASH HAS BEEN LISTED TWICE- ONCE IN SCREEN DUMP FORMAT, & ONCE TRANSLATED THRU CARDCO'S PRINTER INTERFACE. TYPE FROM THE LISTING THAT IS MOST COMFORTABLE FOR YOU, OR USE THEM BOTH.)

-EDITOR



4-10....SET UP OPENING SCREEN 15-25...LOAD SPRITE DATA 26-27...SET SOUND REGISTERS 30-88...START RACE, INCLUDES: 30.....MOVE UP CAR 35-36...REV-UP MOTOR 45.....SET TIME OF START 46....BURN RUBBER 90-150. MAIN LOOP, INCLUDES: 96.....CHECK FOR END OF RACE 100-144. DRAW RANDOM ROAD AT BOTTOM OF SCREEN & FORCE SCROLL 145....DETECT IF CAR IS OFF RO ROAD AND PENALIZE 300-320. READ JOYSTICK, MOVE CAR 300-320.READ JOYSTICK, MOVE CAR AND CHANGE SOUNDS 400-440. FINISH OF RACE SEQUENCE 500-520.1ST SPRITE DATA (CAR)



4 POKE 53281, 15: POKE53280, 0: POKE53269, 0: PRINT": POKE54296, 0: K=0
5 FORI=1T025: PRINT" : NEXT
6 PRINT" : NEXT
7 PRINT" : PORITION : NEXT 8 8 PRINT"@dddddddddddd"
10 POKE 53265, PEEK(53265) AND247
15 U=53248: POKE2042, 13: FORN=0T063: READQ: POKE832+N, Q: NEXT: X=187
20 POKE U+4, X: POKEU+5, 0: POKEU+41, 0
25 POKEU+42, 4: POKE2043, 195: FORN=0T063: READQ: POKE12480+N, Q: NEXT: POKEU+6, X
26 S=54272: FORL=0T024: POKEU+6, X
26 S=54272: FORL=0T024: POKES+L, 0: NEXT: POKES+24, 15: POKES+6, 240: POKES+3, 1
27 POKES+4, 65: F=600: H=INT(F/256): L=F-H\*2
56: POKES, L: POKES+1, H 30 POKE V+7, 0:POKEV+21, 12:FOR P=125T0385
:POKEV+5 P/5:POKEV+21, 12:FOR P=125T0385
:POKEV+5 P/5:POKEV+7 P/5:NEXT:R=3000
35 FORT=1T02:FORF=20010RSTEPF+1:2/10:H=I
NT(F/256):L=F-H\*256:POKES,L:POKES+1,H
36 NEXT:R=2\*R:NEXTT
38 POKES+7,224:POKES+8,46:POKES+12,26:PO
KES+14,200:POKES+19,26
40 POKES+1,10:F=0:POKES,F
45 U=TI
46 POKES+1,10:F=0:POKES,F
45 U=TI
46 POKE55478;11:POKES+11,33:POKES5476,1
1:POKE55478;11:POKES+11,33:POKES+18,21
50 POKE211,18:A=18
88 PRINT"00
99 GOSUB300
94 IFF(220THENF=F+8:POKES,F
95 PRINT"03 96 IFTI>U+3600THENPOKE211,A:PRINT 97 K=K+1 100 ON(INT (RND(0)\*3 ))GOTO 110 1 (RND(0)\*3 ))GOTO 110,120:GOTO 130 IFPEEK(1930)=32 THENGOTO125
GOSUB300:A=A+1:POKE211,A:PRINT"INT"
IFPEEK(1905)=32 THENGOTO115
GOSUB300:A=A-1:POKE211,A:PRINT"
GOTO140
GOSUB300:POKE211,A:PRINT"
":GOTO140 119 130 " : GO 130 GOSUB300:POKE211,A:PRINT" ":GO
TO140
140 GOSUB300
144 IFF(240THENF=F+8 :POKES,F
145 IFPEEK(53279)>0THENPOKE1063,81:K=K-5
:F=0:FORP=0T0100:NEXT
150 GOT090
300 J=PEEK(56320):J=(15-(JAND15))/4:ONJG
OT0310,320
305 IFK)1THENPOKES+11,0:POKES+18,0:RETUR 306 RETURN 310 X=X-2:POKE V+4,X:POKEV+6,X:F=0:POKES +11,33:POKES+18,21:RETURN 320 X=X+2:POKE V+4,X:POKEV+6,X:F=0:POKES +11,33:POKES+18,21:RETURN 400 FORE=1T021:PRINT:GOSUB300:FORW=1T025:NEXTW:GOSUB300:FORW=1T025:NEXT:GOSUB300 410 NEXTE:POKES+1,1:N=1 :FORP=83 T0500:P 0KEV+5,P/N:POKEV+7,P/N:N=N+.006 420 NEXT:POKES+24,0:PRINT"[IIIIIII]SCORE "::PRINTK\*49 425 PRINT"[UIPRESS ANY KEY TO RESTART" 430 GETAS:IFAS=""THEN430 440 RUN4 500 DATA 0.0.0.60.1.224.60.1.224.60.1.22 425 PRINTWUDPRESS ANY KEY TO RESTART"
436 GETAS: IFAS="THEN430"
448 RUN4
500 DATA 0,0 60 1,224 60 1,224 60 1
510 DATA 224 60 1,224 60 1
510 DATA 224 60 1
520 DATA 3,128 1
520 DATA 3,128 1
520 DATA 3,128 1
530 DATA 3,128 0, 1,252 0,1,252 0,1,252
560 DATA 3,128 0,0 1,252 0,1,252 0
560 DATA 0,0 248 0,1 140 0,1 140 0
570 DATA 0,0 248 0,0 248 0,0 1,248 0,0 248 0
570 DATA 0,0 248 0,0 248 0,0 1,248 0,0 248 0
570 DATA 0,0 248 0,0 248 0,0 1,248 0,0 248 0,0 6

WHEN INFO-64 WAS FIRST CONCEIVED, AND SUBSEQUENTLY CREATED, OUR PURPOSE WAS TO HELP COMMODORE 64 ENTHUSIASTS FIND DECENT SOFTWARE AND OTHER PRODUCTS FOR THEIR MACHINES IN A WORLD DOMINATED BY OTHER PERSONAL COMPUTERS AND WHERE 64 PRODUCTS SEEMED SCARCE OR NON-EXISTENT. WE HOPE THE PREMIERE ISSUE FULFILLED THAT AIM, AND BY YOUR RESPONSE TO OUR HUMBLE FIRST OFFERING, WE SURMISE THAT IT DID.

IN THE 3 SHORT MONTHS SINCE INFO'S DEBUT, OUR MISSION HAS SUBSTANTIALLY CHANGED. THE PROBLEM, HAPPILY, FACING 64 USERS TODAY IS THE SUDDEN & OVERWHELMING AVALANCHE OF NEW PRODUCTS FOR A PERSONAL COMPUTER THAT HAS BECOME THE UNDISPUTED LEADER IN THE UNDER- \$1000 ARENA!

IN THE FACE OF THIS "ELECTRONIC CORNUCOPIA". WE NO LONGER FEEL IT SERVES OUR READERS BEST FOR INFO-64 TO COLLECT EVERY POSSIBLE PRODUCT WITHIN THESE PAGES JUST BECAUSE IT HAS "FOR THE 64" STAMPED ON IT.

AND SO WE HAVE ADDED TO OUR EFFORTS THE GOAL (BEGUN IN THIS ISSUE, AND TO BE FURTHER DEVELOPED) OF SCREENING AS WELL AS COLLECTING PRODUCTS. WE THINK WE SHOULD BE ABLE TO HOLD THE ROUNDUP TO ABOUT 1000 OF THE BEST AND MOST INTERESTING PRODUCTS, ELIMINATING ONLY THOSE PRODUCTS WHICH REPRESENT OBVIOUS DUPLICATION (OUR FILES CONTAIN ABOUT 65 UNREMARKABLE MAILING LIST PROGRAMS WITH THE SAME BASIC DESCRIPTION AND PRICE - WE DON'T THINK YOU WOULD ENJOY READING THRU ALL THESE ANY MORE THAN WE DID- LET US KNOW IF WE'RE WRONG).

SOMETIMES A GREAT PRODUCT GETS OVERLOOKED. IF THE COMPANY DOESN'T SEND US INFORMATION OR SAMPLES, AND IF THEY ARE GETTING NO PUBLICITY ELSEWHERE, WE MAY COMPLETELY MISS WHAT THEY HAVE DONE. YOU CAN HELP OUT HERE BY WRITING US ABOUT ANY PRODUCTS NOT LISTED THAT YOU KNOW OF AND SEEM LIKE WORTHWHILE ADDITIONS.

## HOW TO USE THE ROUNDUP >

PRODUCTS ARE ARRANGED BY CATEGORIES (SEE INDEX AT RIGHT). EACH PRODUCT TITLE IS ACCOMPANIED BY A 3-CHARACTER VENDOR CODE, A MEDIA ABREVIATION WHERE APPLICABLE (SEE LEGEND BELOW), PRICE, EXPECTED AVAILABILITY DATE, AND A RATING OF FROM ONE TO FIVE STARS (\*). IF WE DON'T HAVE ONE OF THESE INFORMATION ITEMS, THE LETTERS "NA" WILL APPEAR INSTEAD. IF YOU WANT MORE INFORMATION ABOUT A PARTICULAR PRODUCT, USE THE 3- CHARACTER VENDOR CODE TO LOCATE THE VENDOR IN THE VENDOR ROUNDUP (BEGINNING ON PAGE 59).

LEGEND: (D)=DISK (T)=TAPE (R)=CARTRIDGE (D/T)=DISK OR TAPE AVAILABLE (T+D)=DISK VERSION INCLUDED ON TAPE (R&D) = USES BOTH ROM AND DISK Qn=FISCAL QUARTER (Q1,Q2,Q3,Q4)

#### RATINGS GUIDE

★......NOT WORTH MENTIONING (SO WE USUALLY DON'T)
★★......POOR: EITHER DOESN'T WORK RIGHT (SERIOUS BUGS), OR IS LACKING

IN IMAGINATION, USEFULNESS, OR PERFORMANCE. \*\*\*.....JUST FINE: NO SERIOUS BUGS, PERFORMS REASONABLY WELL - BUT NOTHING SPECIAL (THIS IS SOMETIMES A PRODUCT WHICH HAS BEEN DONE ENOUGH BY OTHERS, LIKE A PLAIN VANILLA MAILING-LABEL PROGRAM, OR

\*\*\*\* A LEADER IN ITS CATEGORY.

(PLUS AND MINUS SIGNS INDICATE SLIGHTLY HIGHER AND LOWER JUDGEMENTS, RESPECTIVELY)

WE DON'T RECOMMEND BUYING ANYTHING RATED BELOW 3 STARS- THERE'S TOO MUCH 600D STUFF OUT THERE TO SETTLE FOR LESS.

ONLY PRODUCTS ACTUALLY TESTED BY INFO-64 OR OUR CONTRIBUTORS ARE RATED -OTHER PRODUCTS SHOW "NA" (NOT AVAILABLE) IN PLACE OF STARS.

# 公公公公

CATEGORY	P6
=======================================	=
	**
BUSINESS ACCOUNTINGINTEGRATED BUSINESS/HOME	25
PERSONAL FINANCES	26
TAX PACKAGES	
CHECKBOOK MANAGEMENT	27
LOANS AND INVESTMENTS	27
MISCELLANEOUS HOME PROGRAMS	
SPREADSHEETS	28
WORDPROCESSING	
DATABASE MANAGEMENT	70
MAILING LIST	31
GENERAL LIST AND FILING	32
MISC. BUSINESS/PERSONAL	32
** EDUCATION/ARTS **	
CLASSROOM ADMINISTRATION	33
TYPING & KEYBOARD MASTERYPROGRAMMING INSTRUCTION	33
GENERAL EDUCATION	10
EDUCATIONAL COLLECTIONS	
GRAPHICS	
PLOTTING & PRINTER GRAPHICS	42
SPRITE / CHARACTER GRAPHICS	42
MUSIC PERSONAL ENRICHMENT/SELF-DISCOVERY	42
PERSONAL ENRICHMENT/SELF-DISCOVERY	443
MISCELLANEOUS**  ** RECREATION **	43
ARCADE & ACTION GAMES	AA
STRATEGY/SIMULATION/PARLOR/& CASIN	ID. 46
GAME COLLECTIONS	
TEXT ADVENTURE GAMES	47
GRAPHIC ADVENTURE GAMES	48
OTHER GAMES	48
** OTHER SOFTWARE **	
PROGRAMMING: LANGUAGESAPPLICATIONS GENERATORS	40
EXTENSIONS TO BASIC	
PROGRAMMING ENVIRONMENT	50
COMPILERS	50
COPY & BACKUP PACKAGES	50
MISC. UTILITIES	51
TELECOMPUTING	51
** HARDWARE **	15 50
MULTI-PURPOSE INTERFACES/NETWORKIN	1652
STANDARD INTERFACES	
VIDEO ENHANCEMENT	53
EXPANSION BOARDS	53
OTHER INTERFACES	53
OTHER INTERFACES	54
MASS-STORAGESENSORY PERIPHERALS	54
SENSORY PERIPHERALS	55
MODEMS	55
USER INPUT DEVICES	33
FURNITURE & ENCLOSURES	54
DOT MATRIX PRINTERS	57
DAISYWHEEL PRINTERS	57
DISPLAYS	
** INFO **	
INFORMATION SERVICES	58
MAGAZINES	58
BOOKS & MISC. REFERENCE	58

DATABOOKS

CYB......(D).....195.00......NDW..NA
GENERAL LEDGER / INVENTORY / BUDGET ANALYSIS / CASH FLOW

/ DEPRECIATION / LOAN MANAGEMENT

CYBER-FARMER

DMI
ACCOUNTS RECEIVABLE/PAYABLE  ECP
==>> THE FOLLOWING ARE MODULES IN A SERIES WHICH ARE ALL: PASSWORD PROTECTED / MENU-DRIVEN / STAND-ALONE OR INTEGRATABLE WITH THE OTHER MODULES / FLEXIBLE REPORTING: GENERAL LEDGER TMW. (D) 99.00 NA NA CASH FLOW MANAGEMENT TMW. (D) 99.00 NA NA PAYROLL MANAGEMENT TMW. (D) 99.00 NA NA ACCOUNTS PAYABLE AND CHECKS TMW. (D) 99.00 NA NA ACCOUNTS RECEIVABLE AND INVOICING TMW. (D) 99.00 NA NA SALES ANALYSIS MANAGEMENT TMW (D) 99.00 NA NA INVENTORY MANAGEMENT TMW. (D) 99.00 NA NA INVENTORY MANAGEMENT TMW. (D) 99.00 NA NA
NEW ADDITIONS
MANAGEMENT SYSTEM 64 ENT
INTEGRATED BUSINESS/HOME >
PRODUCT NAME VENDOR CODE MEDIA PRICE AVAIL RTG.
====>> THE FOLLOWING 5 MODULES CAN BE USED STAND- ALONE OR LINKED IN VARIOUS COMBINATIONS.

FINANCE I PGI......(D/T)......39.95/34.95....NOW..\*\*\*\*
CHECKBOOK MAINTENANCE / CHART OF ACCOUNTS / CHECK SEARCH / CHECK WRITER FINANCE II

PGI......(D/T)......29.95/24.95.....NOW..\*\*\*\* NET WORTH/INCOME/EXPENSE STATEMENTS / DETAIL AND SUMMARY BUDGET ANALYSIS

FINANCE III ....(D/T)......29.95/24.95.....NDW..\*\*\* P61 ... PAYMENTS CALENDER / APPOINTMENTS CALENDAR / MAILING LIST / COLOR GRAPH DESIGN PACKAGE

INT. BUST ZHOME KRONICHO	BUDGET AID MIQ(NA)69.95NANA
FINANCE IV	MENU DRIVEN / CHART OF ACCOUNTS / USER-DEF CATEGORIES / CHECKBOOK W/RECONCILIATION / COLOR GRAPH ANALYSIS
PGI(D/T)29.95/24.95DECNA SPREADSHEET: COMPATIBLE WITH FINANCE I, II, & V.	THE MONEY MANAGER (BUDGET AND CASH FLOW SYSTEM)
FINANCE V PGI(D/T)59.95/54.95DECNA	TM2O/T)24.95NOWNA HOME FINANCE MANAGER
INCOME TAX PACKAGE: PRINTS FORMS, HANDLES MOST SCHEDULES/ USES FINANCE I, II, & IV.	SMC(D)59.95NANA BUDGETING / 3-ACCT CHECBOOK / DEDUCTION FLAGS / CHARTS &
COMPLETE PERSONAL ACCOUNTANT (FORMERLY 'COLOR ACCOUNTANT)	GRAPHS
PGI(D/T)79.95/74.95NOW**** INCLUDES ABOVE MODULES I THRU III: A SOLID SET OF	FAMILY FINANCES SDP(D)33.95NANA
PERSONAL FINANCE TOOLS/ INCLUDES A UNIQUE SELF-RUNNING DEMONTRATION PROGRAM ON THE FLIP-SIDE OF THE DISKETTE	MENU-DRIVEN / BUDGETING / EXPENSES AND INCOME / CHECKBOOK MGR. / SUMMARIES & JOURNALS
WHICH MAKES FIRST-TIME FAIRLY PAINLESS (WE WOULD LIKE TO	CCI BOTTOM LINER
SEE MORE OF THIS TYPE OF BUILT-IN TRAINING AID INCLUDED WITH 'SERIOUS' SOFTWARE.) SEE COMPLETE REVIEW ELSEWHERE	CCI(D)98.75NOWNA HELPS FAMILIES OR SMALL BUSINESS CONSOLIDATE A WIDE
THIS ISSUE. BUDGETEER	RANGE OF INCOME AND EXPENSES. SUMMARIES GENERATED CAN BE USED FOR PROFIT- LOSS AND NET WORTH STATEMENTS AS WELL
ABA(T/D)19.95/22.95NOWNA	AS TAX DATA
PART BUDGET MANAGER, PART SPREADSHEET. PRODUCES BAR CHARTS OF MONTHLY TOTALS AND AVERAGES. ALLOWS 999	LEDGER MWS(D)29.95NOWNA
COLUMNS BY 99 ROWS FOR WORKSHEET	300 TRANSACTIONS / UNLIMITED ACCOUNTS HOUSEHOLD FINANCE
NEW ADDITIONS	CRE(D/T)39.95/29.95NANA
JANE	ACCOUNT-MASTER RAY(D/T)24.95/24.95NOWNA
ARK(NA)NAFEBNA MOUSE & ICON-BASED INTEGRATED SYSTEM: WORDPROCESSING,	NEW ADDITIONS
SPREADSHEET, FILING/ 'ALL ON ONE SCREEN AT THE SAME TIME'. WILL THIS BE THE 64-USER'S SCALED-DOWN ANSWER TO	PERSONAL FINANCE FORECASTER
LOTUS' 1-2-3?? MAGIC DESK I	XAN(NA)NANANA
CBM(R)(100.00NDWNA	THIS PACKAGE EMPHASIZES THE FUTURE BASED ON DATA FROM THE PAST & PRESENT. GENERATES GRAPHS AND REPORTS FOR A
ICON-BASED 'SHELL' PACKAGE THAT WILL HELP THE USER ACCESS AND TRAVEL BETWEEN APPLICATIONS IN A MORE	WHAT-IF LOOK AT YOUR FUTURE FINANCES.
'FRIENDLY' WAY THAN IS NOW USUALLY THE CASE. MAGIC DESK I INCLUDES WORDPROCESSING AND FILING FUNCTIONS/ MORE	HOT(D)64.95NANA CHECK WRITING/ ACCOUNT BALANCING/ UNLIMITED BUDGET
FUNCTIONS ARE SCHEDULED TO COME LATER ON ADDITIONAL	CATEGS./ CREDIT ACCOUNTS/ AUTO-TELLER TRANSXS/ TAX
CARTRIDGES. SMART	SUMMARIES/ SUPPORTS ALL PRINTERS & INTERFACES. ALSO INCLUDES SIMPLE WORDPROCESSING FEATURES.
DEE(D)NANANANANANANA.	BUDGET AIDE MIQ(NA)69.95NANA
LOAN & SAVINGS ANALYSIS/MAIL LIST/ HOME INVENTORY/ TIME MGMNT CALENDAR & SCHEDULING/ ALL LOAD FROM ONE MENU	MENU-DRIVEN/ CHART OF ACCOUNTS/ CHECKBOOK WITH
SUPERBYTE BUSINESS PACK	MANAGEMENT.
SPB(D)100.00NANA INCLUDES: GL/ AR/ AP/ WORDPROCESSOR/ SPREADSHEET/	THE FINANCIAL ASSISTANT GAL(D)49.95NANA
INVENTORY/ CHECKBOOK MNGR/ MAIL LIST/ & 6 UTILITY PROGRAMS	50 ACCOUNTS/ 100 CATEGORIES/ 3200 ENTRIES PER DISK/ SEARCH-SORT ON ANY FIELD/ REPORTS TO WIDE VARIETY OF
THE TRILOGY SERIES	PRINTERS.
TRINANA FILING/ SPREADSHEET/ WORDPROCESSING	BILLWRITER/SUMMARY UHL(T)29.95NANA
	HOME ACCOUNTING & CHECK-WRITING/ PRINTS CHECKS ON REGULAR PRINTER PAPER.
PERSONAL FINANCES >	BOOM PENGWIT CHEVELIN
VENDOR CODE MEDIA PRICE AVAIL RTG.	TAX PACKAGES >
HOME ACCOUNTANT	TAX HANDLER
CON(D)79.95NOW**+ THIS COULD BE AN EXCELLENT PACKAGE, AND INDEED, IS	P6I(T/D)34.95/39.951-84.NA (1040, sched. A, sched. 6)
HIGHLY THOUGHT OF IN ITS FORMATS FOR OTHER MICROS. UNFORTUNATELY, THE PRODUCT WAS RUSHED IN ITS CONVERSION	TAX-MAN SAU(D/T)39.95NANA
TO THE 64 AND, IN ITS PRESENT CONDITION, CAN NOT BE	COMPUTES TAX TABLE / SCHEDS X,Y,Z / INCOME AVERAGING /
RECOMMENDED. THE MOST SERIOUS PROBLEMS ARE THE SLOW DISK-ACCESSING ROUTINES WHICH RESULT IN UNACCEPTABLY	GATOTAX GAT(T)NA
LONG DELAYS DURING ROUTINE PROCESSING. (SEE COMPLETE REVIEW THIS ISSUE)	TAX HELPER
PERSONAL FINANCE ASSISTANT	MAG(D/T)NA'84NA STOCK PORTFOLIO MANAGER
PERSONAL FINANCE 1	BAB(D/T)34.95/29.95NANA STOCK HELPER (TRACK AND ANALYZE STOCKS)
SPE(T)19.95NANA G/L & EXPENSE REGISTER- MENU DRIVEN	MAG(NA)NANANA

DEDUCTABLE FLAGGING / PRINT BY CATEGORY

COANS BUNVESTMENTS
LOAN ANALYZER CRE(D/T)19.95/14.95NDWNA
LOAN CALC FAN(D/T)11.95/9.95NANA
AMORTIZATION PROGRAM INP(D)30.00NOWNA
NEW ADDITIONS
EASY FINANCE (I-V)  CBM(D)(20.00.EACHNOWNA  SERIES OF FIVE LOAN AND INVESTMENT ANALYSIS PACKAGES: I-LOAN ANALYSIS/ II-BASIC INVESTMENT ANALYSIS/ III-ADVANCED INVESTMENT ANALYSIS/ IV-BUSINESS MANAGEMENT/ V-STATISTICS & FORECASTING.  THE INVESTORS PAK
USE(D)39.95NANA 25 BUSINESS & INVESTMENT PROGRAMS IN REAL ESTATE, MORTGAGES, BONDS, LOANS, SHELTERS ETC. HOME MATH ANALYZER
UHL(D)19.95NANA ANALYZES HOME LOANS, SAVINGS, AND SIMPLE STATISTICAL DATA. HOW TO MAKE GOOD INVESTMENTS
TWI(T)39.95NANA COMBINED 50 PAGE TEXT & PROGRAM CASSETTE DESIGNED TO INSTRUCT THE BEGINNING OR OCCASIONAL INVESTOR. BEC
LAW(D/T)89.95/79.95NANA  DESIGNED TO HELP THE ENTREPRENEUR FIND BREAK-EVEN POINT FOR NEW PRODUCT. COMPUTES TOTAL FIXED COSTS, VARIABLE COSTS, & SALES REVENUE AT BREAK-EVEN POINT.  INVESTMENT PORTFOLIO MANAGER  B&B(D)14.95NANA
TRACKS STOCKS AND STOCK OPTIONS/ REPORTS ON 9 INVESTMENT CATEGORIES.
MISC. HOME PROGRAMS >
INSTA-SCHED CIM(NA)NANANA
PERPETUAL CALENDAR GTR(NA)10.00NANA
THE MONTHLY MANAGER (TIME & BUDGET MGR.) COC(NA)29.95NANA
RECIPE BOX  ARI(D)19.95NANA  MENU-DRIVEN 'KITCHEN DATA BASE': SEARCH BY INGREDIENT / SEARCH BY CATEGORY / SEARCH BY BOTH / MEASUREMENT & SERVING CALCULATIONS / DUMP TO PRINTER
DECISION MAKER  CRE(D/T)19.95/14.95NONNA
CAR COSTS CRE(D/T)19.95/14.95NOWNA
HOME INVENTORY SYSTEM GAT(T)9.95NOWNA
HOME INVENTORY  CRE(D/T)19.95/14.95NOWNA
HOME INVENTORY MID(NA)29.95NANA
UTILITY TRACKER & FORECASTER MIQ(NA)29.95NANA
NEW ADDITIONS
C*A*R*S
NLI(D/T)27.50/24.50NANA GRAPH & MONITOR CAR COST & EFFICIENCY/ INCLUDES INSURANCE, PAYMENTS, TAXES, LICENSE FEES & REPAIRS/

PRINTED OR SCREEN RÉPORTS.

## MISC HOME (CONTO )

ACTI-TRIP/ACTI-SPEND/ACTI-MENU

SEI......NA...NA
3 PROGRAMS IN ONE PACKAGE: TRIP PLANNING, SPENDING, &
MENU (FOOD) PLANNING.

COMPUTER MECHANIC

SFS......(D/T)......26.95/21.95....NOW..NA
ANALYZES WIDE RANGE OF SYMPTOMS BASED ON USER INPUT:
TROUBLE-SHOOTING GUIDE / GENERATES MAINTENANCE
SCHEDULES/ HI-RES GRAPHICS SHOW CAR LOCATIONS BEING
REFERED TO

64 PAK

CSA......(NA).....NA.....NA...NA
TEN-PROGRAM BUNDLE FOR THE WHOLE FAMILY: 'FLASH CARDS'
USER-DEFINED FLASH CARDS FOR DRILLS ON MATH, VOCAB ETC.
/ 'SPEED READ' RE-TYPE PHRASES (USER-DEFINABLE) FLASHED
BRIEFLY ON THE SCREEN / 'SIGN TALK' TEACHES THE SIGNING
HAND-CODE OF THE HEARING-IMPAIRED / 'LIFE EXPECTANCY' /
'PERPETUAL CALENDAR' DISPLAY ANY MONTH FROM B.C. TO 9999
A.D. / 'WORLD CLOCK' / 'STATES & CAPITALS' / 'MORTGAGE
CALCULATOR' / 'BIG TIME' LARGE ON-SCREEN COLOR DIGITAL
CLOCK / 'CASH REGISTER' SHOPPING SIMULATION TEACHES
CHILDREN TO MAKE CHANGE.

#### SPREADSHEETS .....

PRODUCT NAME VENDOR CODE

MEDIA PRICE

AVAIL RTG.

CALC RESULT

BSS......(R+D)....149.95......NOW..\*\*\*\*\*

3-DIMENSIONAL SPREADSHEET SUPPORTS SPLIT SCREENS/
WINDOWS/ COLOR GRAPHING/ EXTENSIVE HELP SCREENS/ COMPLEX
FORMULAS. SEARCH & SORT ROUTINES WOULD MAKE THIS
POWERFUL PACKAGE 'PERFECT' (SEE REVIEW FALL ISSUE)

PRACTICALC

CSA.....(D/T).....54.95/49.95....NOW..\*\*\*\*
EASY TO USE SPREADSHEET. SEARCHING & SORTING FEATURES
ADD EXTRA VALUE HERE.

SPREADSHEET ASSIST

RCC...(NA)...125.00...NA...NA
BUSICALC 1
SEW...(NA)...69.00...NOW..NA
INSTA-CALC
CIM...(NA)...NA...NA...NOW..NA

FINANCE CALC

CALC (NA)......69.00......NA...NA

BCALC

MTS.....(D/T).....44.95/39.95....NOW..NA

#### NEW ADDITIONS



MULTIPLAN

HES......(D)......99.95......NOW..NA
MICROSOFT'S POPULAR ADVANCED SPREADSHEET PACKAGE IS NOW
AVAILABLE FOR THE 64 AT A FRACTION OF ITS ORIGINAL PRICE
AND WITH MOST OF ITS ORIGINAL POWER. SINCE MICROSOFT
HAS TAKEN H.E.S. UNDER ITS WING, WE CAN LOOK FORWARD TO
MANY MORE EXCELLENT OFFERINGS FOR THE 64!

OMNICALC

HES.......(R).......49.95......NOW..NA

PS: THE PROGRAMMABLE SPREADSHEET
CSA.....(D)......79.95......NOW..NA
ADVANCED SPREADSHEET USES THE PROGRAMMABILITY OF BASIC
TO ALLOW COMPLEX OPERATIONS IN A SPREADSHEET FORMAT.

JANECALC

ARK......(NA).....NA......FEB..NA
SPREADSHEET PART OF 'JANE', A MOUSE-BASED INTEGRATED
SOFTWARE BUNDLE.

BUSICALC 2

SEW.......(NA)......99.00......NDW..NA

ESP>CALC

NLI........ (D/T)......47.50/43.50....NA...NA

#### MORDEROCESSING

PRODUCT NAME

VENDOR CODE

MEDIA

PRICE

AVAIL RTG.

WORDPRO 3 PLUS/64 (NOW INCLUDES SPELLRIGHT PLUS)

PRO.....(D)......99.95......NOW..\*\*\*\*
SOLID, FULL-FEATURED, AND A STANDARD OF THE INDUSTRY.
WIDELY SUPPORTED BY OTHER VENDORS' PRODUCTS. COMPLETE
WITH ALL USUAL FEATURES PLUS TRUE GLOBAL SEARCH/ SEARCH
& REPLACE (THRU ENTIRE DISK IF DESIRED), LINKED
DOCUMENTS FOR UNLIMITED LENGTH, NUMERICS, AND
COMPATIBILITY WITH SEVERAL OTHER MAJOR PRODUCTS. THE
ONLY FEATURES LACKING ARE ON-SCREEN FORMATTING, &
MULTI-COLUMN CAPABILITY. (NOW INCLUDES 'SPELLRIGHT'
(FORMERLY 'SPELLMASTER') WHICH SOLD FOR \$89.95 BY ITSELF
UNTIL RECENTLY. 'SPELLRIGHT' IS AN 18,000-MORD
SPELLING-CHECKER WITH ROOM FOR 1500 ADDITIONAL
USER-ENTERED WORDS.)

SCRIPT 64

RTC......(D).....139.95.......NOW..\*\*\*
FULL-FEATURED WITH SEARCH & REPLACE, NUMERICS, SCREEN
FORMATTING, AND DICTIONARY SOFTWARE BUILT IN (YOU MUST
BUILD THE VOCABULARY YOURSELF. SUPPORTS 80 COLUMNS WITH
RICHVALE'S NEW COLOR-80 SOFTWARE (SEE VIDEO ENHANCEMENTS
SECTION)



EASY SCRIPT

TOTL. TEXT 2.6

TOT......(D/T)......44.00/40.00....NOW..\*\*\*\*
WRITTEN SKILLFULLY IN BASIC WITH MACH. LANG. SUBROUTINES
FOR INCREASED SPEED. FEATURES INCLUDE MERGING OF LABELS
CREATED WITH TOTL.LABEL 2.6 FOR FORM LETTERS ETC.
MENU-DRIVEN. NO SEARCH & REPLACE. CAN BE USED WITH
TOTL'S NEW TOTL.SPELLER 3.6 FOR 'ELECTRONIC
PROOFREADING'.

WORD MACHINE/NAME MACHINE

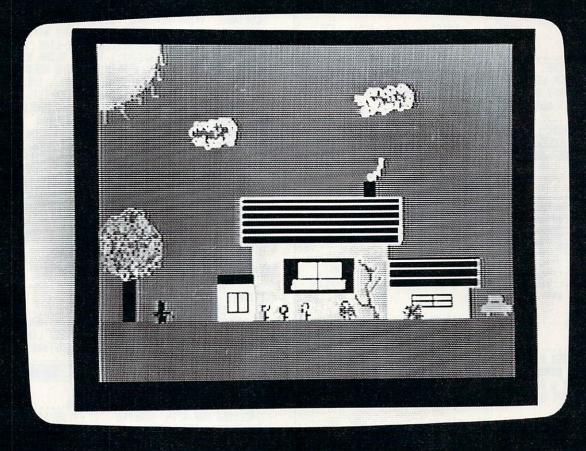
CBM......(D)......19.95......NOW..\*\*\*
YOU GET A MINI WORDPROCESSOR AND MENU-DRIVEN MAILING
LIST PROGRAM SUITABLE FOR LIGHT-WEIGHT LETTER WRITING
AND MAILINGS. DEFINITELY WORTH THE MONEY IF THIS IS ALL
YOU NEED. ALSO INCLUDED ARE DOS 5.1 AND A NICE PROGRAM
THAT WILL ADD A 'SMART' DIRECTORY MENU TO ANY OF YOUR
DISKETTES.

HESWRITER 64

HES.....(R).....44.95.....NOW..\*\*\*CARTRIDGE-BASED WORDPROCESSOR.

WORDPRO 1 PLUS/64

PRO.....(T)......39.95......NA...NA
(WORDPRO 'JUNIOR' ON TAPE / SIMILAR FEATURES MINUS
GLOBAL ROUTINES.)



## SOPHISTICATED SOFTWARE OF AMERICA™ PRESENTS

## GRAFIX-ARTIST™

(Commodore 64™ version)

# THE LATEST IN EDUCATIONAL GRAPHICS SOFTWARE DESIGNED WITH THE CONSUMER IN MIND

CREATE EXTRAORDINARY COLOR - GRAPHICS USING THE:

- Joystick Mode
   Program Mode
- Program to Picture Utility (for your Basic or Machine language programs)

GRAFIX-ARTIST™ provides comprehensive

● Reference Card ● Help Screens ● Introduction Tutorial ● Demo's

## NO COMPUTER EXPERIENCE IS NECESSARY

Children, parents, artists, educators will enjoy the ease-of-use and options GRAFIX-ARTIST™ provides.

NOW AVAILABLE: GRAFIX - PRINTER™

Dealer and Distributor Inquiries Invited

198 Ross Rd King of Prussia, PA 19406 (215) 265-2277



RUBBIRDO	4:X:3()	GREET	THEOREM S
PRODUCT NAME VENDOR CODE			AVAIL RTG.
PAPER CLIP			
THIS HAS THE L	ONGEST LI	ST OF FEA	NOWNA TURES OF ANY
WORDPROCESSOR WE	HAVE SEEN.	AND IS GENER	ALLY GETTING THE
SAME 3RD-PARTY SU MIRAGE CONCEPTS WORD			J5/6 <del>4</del>
MIR	. (D/R)	99.95	NOWNA
FULL-FEATURED: LII SPELLING CHECKER	40 OR 80	COLUMNS (80	COLUMN MODE DOES
NOT REQUIRE ANY	ADDITION	AL HARDWARE)	/ MANY MORE
FEATURES WORDMANAGER			
DAT * FREE WITH THE	. (R)	. * FREE	NOWNA
EXPANSION CARTRIDO ON-SCREEN FORMATT	SE. FEATU	RES: 80 COLUM	NS (NATURALLY) /
ON-SCREEN FORMATT		DARD 'FEATURE	STRIP' / DISK &
EASY SCRIPT			
SAME NAME. DIFF	.(D)	99.00	NANA S WITH THEIR
'SUPERBASE 64' DB			with their
WORDCRAFT UMI	. (NA)	149.00	NANA
WRITE NOW			
FULL-FEATURED WIT	H GLOBAL S	49.95 EARCH & REPLA	NUWNA
ROMAN PAGE NUMBER	ING / AUDI	O CASSETTE IN	STRUCTIONS WITH
MANUAL / UP & DOW SAVES TO TAPE OR		P / LINKS MIII	H . HAIL NOW. /
COPY-WRITER	(NA)	145.00	NON NV
FEATURES INCLUDE	DOUBLE COL	UMNS & SHORTH	AND.
QUICK BROWN FOX	(R)	65.00	NOWNA
A POPULAR AND FULI			
RAPIDWRITER HDM	.(T+D)	59.95	NOWNA
LISTABLE BASIC PRI COPY IS CUSTOMI	OGRAM: LACI	KS GLOBALS AN	NUMERICS. EACH
INTERFACE.	LED FUR	וטטא ראאוונטו	THE LEGISTER &
WRITER'S ASSISTANT	(NA)	125.00	NOM NA
WORD CRAFT ULTRA 64			
INSTA-WRITER	. (NA)	NA	NANA
CIM	.(R)	NA	NANA
	. (D/T)	24.95/19.9	5NANA
SOFT-WRITER RAY	(D/T)	24.95	NOWNA
GATOS LETTER			
SCRIPT EASE	. (1)	12.95	NANA
MWS	.(T)	39.50	NANA
NE	W ADD	ITIONS	
JANEWRITE			
WORDPROCESSING	.(NA)	NA	A MOUSE-RASED
INTEGRATED SOFTWA		Onne	. HOUVE DROLD
HOMEWORD SIE	(D)	49.95	DECNA
ICON-BASED, MENU/	JOYSTICK-D	RIVEN WORDPRO	CESSOR DESIGNED
TO BE ESPECIALLY (EXPERIENCED USE	RS MAY E	LECT TO USE	CASIONAL USERS FASTER DIRECT
KEYBOARD CONTROL)	. INCLUDES	AUDIOTAPE-BA	SED TUTORIAL AND
SO THOE HANDHL			

CIRCASCRIPT
CIR(D)39.95NOW****  COPYABLE (FOR PERSONAL BACKUPS), MACHINE LANGUAGE WORDPROCESSOR IS VERY FAST AND LOADED MITH FEATURES: ME ESPECIALLY LIKE THE ON-SCREEN, ONE-LINE PROMPTS WHICH ACCOMPANY MOST OPERATIONS. THESE, ALONG WITH FULL-PAGE HELP SCREENS, VIRTUALLY ELIMINATE THE NEED TO REFER TO THE MANUAL AFTER THE FIRST READ-THRU. THE GLOBAL SEARCH & REPLACE IS THE FASTEST WE HAVE SEEN YET. SUPPORTS THE USUAL ARRAY OF EDIT & FORMAT CONTROLS ALONG WITH EMBEDDED PRINTER CONTROLS. PROBLEMS: THE PRINTER INTERFACING SECTION IS TOO TECHNICAL FOR MOST USERS. THE COPY WE TESTED HAD A PROBLEM WHEN USED WITH A GEMINI-10X AND CARDCO INTERFACE: UPPER CASE LETTERS APPEARED WHERE LOWER CASE SHOULD HAVE BEEN & VICE-VERSA! CIRCADIAN IS UPGRADING CIRCASCRIPT TO CORRECT THIS. IF YOU HAVE THE EARLIER VERSION, YOU CAN HAVE YOUR DISKETT UPGRADED AT NO CHARGE (EXCEPT POSTAGE); IN FACT CIRCADIAN'S POLICY (WHICH WE APPLAUD) IS TO PROVIDE ANY AND ALL SOFTMARE UPGRADES AT NO COST TO THEIR CUSTOMERS. BUSIWRITER
SEW(?)99.00NANA
SFT(D/T)NANANA
EPI(D/T)89.00NOWNA
4-DIRECTION SCROLLING/ 70 COMMANDS/ WORKS WITH MOST PRINTERS/ SENDS PRINTER CONTROL CODES/ LINK FILES ON UF TO 4 DISKETTES/ INTEGRAL TERMINAL SOFTWARE.
SPELLING CHECKERS
SPELLRIGHT PLUS (FORMERLY SPELLMASTER) PRO(D)(50.00NOW**** INCLUDED NOW WITH WORDPRO III PLUS/64, MAY ALSO BE
SPELLRIGHT PLUS (FORMERLY SPELLMASTER)  PRO(D)(50.00NOW****  INCLUDED NOW WITH WORDPRO III PLUS/64, MAY ALSO BE PURCHASED SEPARATELY. (SEE WORDPRO III ABOVE FOR DESCRIPTION.)  TOTL.SPELLER 3.6
SPELLRIGHT PLUS (FORMERLY SPELLMASTER)  PRO(D)(50.00NOW****  INCLUDED NOW WITH WORDPRO III PLUS/64, MAY ALSO BE PURCHASED SEPARATELY. (SEE WORDPRO III ABOVE FOR DESCRIPTION.)  TOTL.SPELLER 3.6  TOT(D)35.00NOWNA  CHECKS SPELLING OF DOCUMENTS CREATED WITH TOTL.TEXT 2.6/ COMPILED BASIC/ OPERATES UNATTENDED/ 10,000-WORD STARTER DICTIONARY IS EXPANDABLE TO 24,000 WORDS BY USER/ SUPPORTS MULTIPLE DRIVES & 80-COLUMN HARDWARE.
SPELLRIGHT PLUS (FORMERLY SPELLMASTER)  PRO(D)(50.00NOW****  INCLUDED NOW WITH WORDPRO III PLUS/64, MAY ALSO BE PURCHASED SEPARATELY. (SEE WORDPRO III ABOVE FOR DESCRIPTION.)  TOTL.SPELLER 3.6  TOT(D)35.00NOWNA  CHECKS SPELLING OF DOCUMENTS CREATED WITH TOTL.TEXT 2.6/ COMPILED BASIC/ OPERATES UNATTENDED/ 10,000-WORD STARTER DICTIONARY IS EXPANDABLE TO 24,000 WORDS BY USER/ SUPPORTS MULTIPLE DRIVES & 80-COLUMN HARDWARE.  EASYSPELL 64  CBM(D)(25.00NOWNA  20,000-WORD DICTIONARY & SPELLING CHECKER/ WORKS WITH
SPELLRIGHT PLUS (FORMERLY SPELLMASTER)  PRO(D)(50.00NOW*****  INCLUDED NOW WITH WORDPRO III PLUS/64, MAY ALSO BE PURCHASED SEPARATELY. (SEE WORDPRO III ABOVE FOR DESCRIPTION.)  TOTL.SPELLER 3.6  TOT(D)35.00NOW.NA  CHECKS SPELLING OF DOCUMENTS CREATED WITH TOTL.TEXT 2.6/ COMPILED BASIC/ OPERATES UNATTENDED/ 10,000-WORD STARTER DICTIONARY IS EXPANDABLE TO 24,000 WORDS BY USER/ SUPPORTS MULTIPLE DRIVES & 80-COLUMN HARDWARE.  EASYSPELL 64  CBM(D)(25.00NOW.NA  20,000-WORD DICTIONARY & SPELLING CHECKER/ WORKS WITH EASYSCRIPT 64.  MIRAGE CONCEPTS SPELLING CHECKER
SPELLRIGHT PLUS (FORMERLY SPELLMASTER)  PRO(D)(50.00NOW****  INCLUDED NOW WITH WORDPRO III PLUS/64, MAY ALSO BE PURCHASED SEPARATELY. (SEE WORDPRO III ABOVE FOR DESCRIPTION.)  TOTL.SPELLER 3.6  TOT(D)35.00NOWNA  CHECKS SPELLING OF DOCUMENTS CREATED WITH TOTL.TEXT 2.6/ COMPILED BASIC/ OPERATES UNATTENDED/ 10,000-WORD STARTER DICTIONARY IS EXPANDABLE TO 24,000 WORDS BY USER/ SUPPORTS MULTIPLE DRIVES & 80-COLUMN HARDWARE.  EASYSPELL 64  CBM(D)(25.00NOWNA  20,000-WORD DICTIONARY & SPELLING CHECKER/ WORKS WITH EASYSCRIPT 64.  MIRAGE CONCEPTS SPELLING CHECKER  MIR(NA)NANANA
SPELLRIGHT PLUS (FORMERLY SPELLMASTER)  PRO(D)(50.00
SPELLRIGHT PLUS (FORMERLY SPELLMASTER)  PRO(D)(50.00
SPELLRIGHT PLUS (FORMERLY SPELLMASTER)  PRO(D)(50.00

WE LIKE THIS DBMS (DATABASE MANAGEMENT SYSTEM) - SOME REASONS; FLOATING FIELD STRUCTURE/ CONFIGURES TO EVERY KNOWN COMBINATION OF COMMODORE & NON-COMMODORE EQUIPMENT (HARD DISKS INCLUDED)/ POWERFUL SEARCH AND REPORT OPTIONS/ WILD-CARDS & PATTERN MATCHING/ RUN-TIME ADDED FIELDS/ CALCULATED FIELDS & COLUMNS/ OUTPUT TO MANY POPULAR WORDPROCESSORS, ETC. (SEE REVIEW FALL ISSUE.)

M'FILE

DEE.....(D).....109.95......NOW..\*\*\*\*
MENU-DRIVEN / 32 FIELDS PER RECORD / 250 CHARS. PER RECORD / 78 CHAR. PER FIELD / 1000 RECORDS PER DISKETTE / CALCULATED FIELDS / SORT ON ANY FIELD / FAST KEY SEARCH / CREATE SEQUENTIAL FILES FOR WORDPROCESSORS / BUILT-IN BACKUP ROUTINE / DOES NOT ALLOW RE-STRUCTURING OF FILES.

#### DITTELLARING MIRAGE CONCEPTS DATABASE MANAGER WORDPROCESSORS / 250 CHARS. PER FIELD / 200 FIELDS PER RECORD / CALCULATED FIELDS / ENTIRE PROGRAM RESIDES IN RAM SO DISKS NEED NOT BE SWAPPED DURING OPERATION / NE FOUND THE MAILING LABEL AND REPORT ROUTINES SOMEWHAT RESTRICTIVE. WELL-DOCUMENTED WITH HANDS-ON TURORIALS. DISK DATA MANAGER UP TO 1200 RECORDS PER FILE / SORTS 2-DEEP / SEARCHES 3-DEEP / 18 FIELDS PER RECORD / 24 CHAR. PER FIELD / MENU-DRIVEN DELPHI'S ORACLE 8000 CHARS., 99 FIELDS, 9 SCREENS PER RECORD / REPORTS / MAIL LABELS / PASSWORD PROTECTION. POWERFILE MENU DRIVEN / APPLICATION TEMPLATES INCLUDED / 254 CHAR. PER RECORD / 254 CHAR. PER RECORD / SORT ON ANY FIELD / SORT 5 DEEP / CREATES SEQUENTIAL FILES FOR WORDPROCESSORS ASERT ..... (D).........NA.... MENU-DRIVEN WITH SAMPLE RECORDS INCLUDED. 30 FIELDS PER RECORD / 180 SEARCH WORDS / BUILT-IN STATISTICAL CAPABILITIES / SORT ON ANY FIELD / COMPILED BASIC WITH ML SORT ROUTINES INSTA-FILE CIM...........NA...........NA...........NA....NA CREATE-A-BASE COMPILED BASIC / 8 DEEP SORTS / MENU-DRIVEN MINI JINI .....(R).........89.95... .....NOW..NA ENTRY LEVEL DBMS / 500 RECORDS PER DISKETTE / SINGLE DEPTH SEARCH AND SORT (AD-ON MODULES ALLOW DEEPER SEARCH AND SORTS) / INTERFACES TO JINSAM 8.0 / AVAILABLE IN ENGLISH, SPANISH, AND FRENCH (GERMAN SOON) / APPLICATIONS TEMPLATES AVAILABLE FOR 14.95 EA. - 24 TO BE RELEASED OVER NEXT TWELVE MONTHS (GIFT CERTIFICATES AVAILABLE IN DENOMINATIONS EQUAL TO PRODUCT PRICES) JINSAM 8.0 FOR THE 64 64 VERSION OF THE WELL-KNOWN DATABASE MANAGER / 4 LEVELS OF SECURITY / RESTRUCTURABLE / UNLIMITED SORTS AND SEARCHES / 1000 RECORDS / 1500 CHAR. PER RECORD / 255 FIELDS PER RECORD DATALO6 MWS......(D)......39.50......NDW..NA DATABASE MANAGER- INTERFACES TO MOST WORDPROCESSORS DATMAN SWC......(D)......59.95.....NA...NA 19 FIELDS / SEARCH, SORT, PRINT REPORTS AND LABELS / INTFCS TO WORDPRO ÉTC. DATA BASE 64 DATA/FILE PLUS DI6......(D)......99.95......NOW..NA SUPERBASE ....NA..... ... (?) ... IMPRESSIVE SOUNDING SPECIFICATIONS INCLUDE: 1000 CHARS. PER RECORD / UP TO 4 SCREENS PER RECORD / FILE SIZE TO ..(D)........54.95......NDW..NA MSP. 16 MILLION CHARS. / RESTRUCTURING / SPREADSHEET, CALENDAR, AND CALCULATOR FUNCTIONS / LINKS TO EASY PRINTS 4-UP / 1200 ENTRIES PER DISK MAX

SCRIPT WORDPROCESSOR / READY-MADE TEMPLATES AVAILABLE

NEW ADDITIONS
SOLIDEX
SOL(D)99.95NOW**** REVOLUTIONARY DISK-ACCESS TECHNIQUES INCREASE THE SPEE DF 1541 DISK OPERATIONS BY AS MUCH AS 20 TIMES!/ MANAG UP TO 625 'CARDS' PER DISKETTE/ LIGHTNING-FAST SEARCHE WITH SOPHISTICATED CONDITIONALS. THO WELL DOCUMENTED THIS PACKAGE, LIKE ANOTHER SOLIDUS PRODUCT- SYSRES, HA A RATHER COMPLICATED FEEL AND TENDS TO BE OVERWHELMIN (DUE PARTLY TO THE EXTENSIVE OPTIONS, BUT ALSO T SOLIDUS' UNIQUE STYLE OF STRUCTURING AND WRITING)/ DOE NOT GENERATE NECESSARY OUTPUT FOR USE BY WORDPROCESSORS THE MANAGER
CBM(D)(50.00NOWNA
DATA BASE MANAGER INTERFACES WITH WORDPROCESSORS CREATES SUBFILES/ SORTS ON ANY FIELD/ GENERATE REPORTS
HOME FILE WRITER
DYT(D)69.95NANA THIS PACKAGE ACTUALLY GENERATES CUSTOM FILING-TYP APPLICATIONS SOFTWARE (SORT OF A DATABASE MANAGE CONSTRUCTION KIT). ONCE CREATED, THE NEW PROGRAMS RU INDEPENDENTLY AND CAN BE MODIFIED BY THE USER. INCLUDE A COUPON WHICH APPLIES TOWARD PURCHASE OF A COMPANIO REPORTING PROGRAM. DREAM-DB
CAN(D)*99.95NANA 'HIGH-LEVEL RELATIONAL DATA BASE MANAGEMEN'
SYSTEMENGLISH-LIKE COMMAND LANGUAGEGENERATE ALMOS ANY IMAGINABLEAPPLICATION.' INCLUDES: DATA RELATIOI GENERATOR/ REPORT GENERATOR/ INTERACTIVE COMMAN INTERPRETER/ SCREEN GENERATOR/ MENU GENERATOR/ PROGRAI EDITOR AND COMPILER.  *(MUST BE USED WITH COMPANION PRODUCT, 'DISK ACCES: MANAGER' (D.A.M.)- SEE PROGRAMMING SECTION.)
DREAM-DB APPLICATION CASEBOOK CAN(D)99.95NANA
TEN READY-TO-RUN APPLICATIONS FOR DREAM-DB (ABOVE) APPOINTMENT SCHEDULING/ CHECKBOOK BALANCING/ TELEPHON DIRECTORY/ MAILING LIST/ BUDGET MANAGEMENT/ AR/ AP CHECK WRITER/ INVENTORY/ ORDER ENTRY. CAN BE USED AS-II OR MODIFIED BY USER. TOTL.INFOMASTER 3.6 TOT(D)
SORT & SEARCH/ COMPATIBLE WITH TOTL.TEXT, TOTL.LABEL
TOTL.TIME, RESEARCH ASSISTANT, AND TOTL.BUŚINESS FILES BASIC WITH MACH. LANG. ROUTINES/ SUPPORTS MULTIPL DRIVES, MOST PRINTERS, 80-COLUMN HARDWARE/ INCLUDE BUILT-IN BACKUP UTILITIES. INFOBASE 64
KOL(D)59.95NANA
DATABASE 64 MEL(D)39.95NANA
DDB-ONE (RELATIONAL DATABASE) MIG(D)89.95NANA
MATLING-LIST
PRODUCT NAME VENDOR CODE MEDIA PRICE AVAIL RTG
TOTL.LABEL 2.6 TOT(D/T)24.00/20.00NOW**** MACH.LANG. SUBROUTINES SPEED CRITICAL OPERATIONS COMMENT LINES / SORTING / BROWSE / MERGES WITH TOTL.TEX 2.6
THE MAILER SUS(D)38.00NOW***
MAILING LIST

MATLING STS (CONT.D.)
MAIL NOW
CAR(D)39.95NOWNA MACH. LANG. SORTS / ASSEMBLY LANGUAGE PROGRAM / MENU-DRIVEN / SUPPORTS 600 ENTRIES / 1 TO 3 LABELS ACROSS / COMMENT LINE / CATEGORY FIELD / SOR BY ZIP, CATEGORY, LAST NAME, DR STATE / SEARCH ANY FIELD- WILD CARDS SUPPORTED / INCLUDES DISK BACK-UP UTILITY / LINKS WITH 'WRITE NOW'
COMMODORE 64 MAILLIST
RAK(D/T)17.95/14.95NANA MAINTAINS 300 ENTRIES MAILFILE STE(T)14.95NANA
MANAGES 200 ENTRIES PER FILE MAILING LIST 64 ENT(NA)39.00NANA
DELUXE ADDRESSER BRI(T+D)40.00NANA
ADDRESS MITE
NEL(D/T)16.95/14.95NANA INSTA-MAIL CIM(NA)NANANA
MAIL IT 64 LIT(NA)NANANA
QUICKMAIL
OBF(NA)NANA 64 MAILING LIST DES(T/D)30.00/35.00NOWNA
THE MAILING LIST  6AL(T/D)27.95/29.95NOWNA
MAILING-LIST LUN(T/D)39.95/44.95NOWNA
MAILING LIST LOG(T)24.50NOWNA
MAILING LIST V2.0 SPE(T)19.95NDWNA
NEW ADDITIONS
MAILPRO 64
PRL(D)129.95NANA 'TOTAL FORMAT AND RECORD SELECTION CONTROLWORDPRO COMPATIBLEUP TO 4000 RECORDS ON 1541'
GENERAL IST & FILING >
PRODUCT NAME VENDOR CODE MEDIA PRICE AVAIL RTG.
DIARY 64 CMS(D/T)39.95/34.95NOWNA
ELECTRONIC NOTEBOOK- KEEPS TRACK OF APPOINTMENTS, PHONE NUMBERS, MEETINGS, BIRTHDAYS, ETC. / ACCESS BY VARIOUS KEY (DATE, NAME, ETC.)  DATA MANAGER THW(D/T)24.95NOWNA
SDB 64
SIP(D)39.95NANA GENERAL PURPOSE FILING SYSTEM FOR ADDRESSES, HOBBIES, ETC. SORT & RETRIEVE BY ANY FIELD. MENU- DRIVEN WITH PRINTOUT CAPABILITY TAPEWORM
ECP(NA)12.95NANA TAILORED EXPECIALLY FOR KEEPING TRACK OF YOUR TAPES AND RECORDS LIST HELPER
MAG(NA)NANA EDIT, ENTER, AND SORT VARIOUS LISTS LIST MITE 2
NEL(D/T)16.95/14.95NANA GENERAL LIST MANAGEMENT FOR INVENTORIES, COLLECTIONS, ETC.

OMNIFILE	(5.47)	10.05	NA NA
DATAFILE		.19.95	
INVENTORY MANAGER		.17.95/15.95.	
FILE/CARD		.19.95	
DATA/SCAN		.29.95	
DI6	. (D)	.29.95	NOWNA
NE	W ADD	ITIONS	
LO6	(2)	9.95	NA NA
EVENT LOGGING AID. THESIS MASTER			
MCR	. (D)	29.95	NANA
ORGANIZES RESEAR REPORTS/ SORT & S STAMP COLLECTOR	ELECT.		
STORE UP TO 14 FI		29.95 EACH ISSUE I	
NOS., CAT. VALUES	100.00		
MCR PERSONAL ELECTRON	. (D)	29.95	NANA
THE STEP WITH			DRAP 5
PRODUCT NAME			
VENDOR CODE	MEDIA	PRICE	AVAIL RTG.
TOTL.TIME 2.6	. (T/D)	.35.00/39.00.	NOW***+
USEFUL FOR SCHEDU			
ABA TOOL FOR CREATING	RAR CHARTS	.14.95/17.95. OF VARIOUS DA	NOWN.A.
RESEARCH ASST.			NOW***+
UNIQUE CROSS-REF. BIBLIOGRAPHER	TOOL FOR B	IBLIOGRAPHIES	ETC.
	.(D)	50.00	NOWN.A.
DATE DUE		70.50	
LIBRARY UTILITIES	TO MANAGE	39.50 OVERDUES E	TC. PRODUCES
HARDCOPY / SORTS MASTER LIBRARY PROGR	AM		
INTERESTING PROGR	AM FOR MANAG	39.50 SING LARGE C	OLLECTIONS OF
COMPUTER DISKETTE SORTING / SEARCHE	S. CATALOGS	OVER 8000 T	ITLES / M.I.
CCI RETAILER 64		1073.00	
INTEGRATED HARDW INCLUDES: IEEE-48	ARE/SOFTWARE	POINT OF	SALE SYSTEM.
CONTROLLED CASH INVENTORY DISKETT	DRAWER /	TRANSACTION	DISKETTE /
SOFTWARE / MONITO	R- PEDESTAL	/ USER'S MANU	AND TERMINAL AL
FARM MANAGER I (GENE	. (D)	. 49. 95	NOWNA
INCLUDES: INVESTM MACHINE COST / AN	D BUSINESS S	TUDY PROGRAMS	D PURCHASE /
FARM MANAGER II (BEE	. (D)	.49.95	NOWNA
INCLUDES: BEEF CAP CATTLE / BEEF MARI	LF PRODUCTION IN THE PRODUCTION IN THE PRODUCTION OF THE PRODUCTIO	)N / CATTLE FE	EDER / HEAVY
FARM MANAGER III (PDI	RK PRODUCTION	N) .49.95	
INCLUDES: PI6 PROPRATION ANALYZER	DUCTION / PI	6 FEEDER / HE	AVY HOGS / AND
	4		

NUMERIC KEYPAD (SOFTWARE)	GRADEPRO
CYB(D)14.95NOW***  CONVERTS PART OF YOUR KEYBOARD INTO A NUMERIC CLUSTER  MORE SUITABLE FOR FINANCIAL AND ACCOUNTING WORK. STICK- ON LABELS INCLUDED FOR KEY-TOPS. 'KEYPAD' CAN BE TOGGLED ON AND OFF EASILY DURING OPERATION, AND ROUTINES MAY BE COPIED ONTO APPLICATION DISKETTES FOR CONVENIENCE.  FORM GENERATOR SIM(NA)19.95NANA APPOINTMENTS	GEM(T/D)25.00  FULL-FEATURED GRADING UTILITY, ALLOWS WE STRAIGHT AVGS., GENERATES BAR GRAPHS DISTRIBUTIONS, AUTOMATIC GENERATION OF PROGREMASTER GRADES PROGRAM  MWS(D)NA  COMPREHENSIVE GRADES MANAGEMENT SYSTEM FOR INCLUDES ATTENDANCE / POINT- SYSTEM, PERCEPTION OF PROGREMANCE OF OF PR
SIM(NA)24.95NANA TASK ORGANIZER	NEW ADDITIONS
SIM	COMPUGRADE  MES
EVENTS. 40 COMMANDS ALLOW SCHEDULING BY 15 MIN., 30 MIN., DAILY, WEEKLY, OR MONTHLY INTERVALS. REPEAT, MOVE, & RESCHEDULE EVENTS/ FIND FREE TIME INSTANTLY. ON-LINE HELP, COLOR & SOUND, ON-SCREEN REAL-TIME CLOCK/CROSS-REFERENCING/ PASSWORD-PROTECTION/ HARD-COPY REPORTS/ UP TO 8000 EVENTS PER DISK/ SCHEDULE THRU THE YEAR 2000/ UNLIMITED PERSONS AND COMMENTS PER DAY.  DISGALENDER SUD	PAC(T)19.95.  THIS IS A PRETTY FAIR TYPING TUTOR WHICH US FACE AND ANNOYING SOUND EFFFECTS TO PRESSURE MASTER TYPE  LIG(D)39.95.  EARNED INFOWORLD'S HIGHEST RATINGS. WE LIKE "LEARN TO TYPE OR GET BLOWN TO BITS" INSTRUCTION WITH ARCADE PLAY.  TOUCH TYPING TUTOR TAY(T/D)19.95/24.95 19 LESSONS AND 12-PG. MANUAL.  QUICKFINGER QBF(NA)NA  QUICK BROWN FOX'S TYPING TUTOR.  KIDS ON KEYS SPI(R)NA FROM SPINNAKER'S LEARNING GAMES SERIES.
RESTAURANT MANAGER SUD(D)79.95NANA	NEW ADDITIONS
POINT OF SALES RESTAURANT SYSTEM: HANDLES & TABLES / 250 MENU ITEMS / CREDIT CARDS & TIPS / PRODUCES KITCHEN & SERVER REPORTS.  BARTENDER'S FRIEND RLR(T)	TYPING DRILLER PIO(D)29.95 CHOSE SELECTIVE PRACTICE, RANDOM PRACTICE, DRILL MODES. WE EXPECIALLY LIKE THE DETAIL OF USER'S PROGRESS AND PROBLEM AREAS. MINOR IN PRACTICE MODES, THE PROGRAM OCCASIONALLY SECOND BEHIND THE TYPIST IN DISPLAYING CHARAITHIS CAN BE DISTRACTING.

00.....NOW.NA
ALLOWS WEIGHTED OR
R GRAPHS OF GRADE N OF PROGRESS REPORTS.

SYSTEM FOR TEACHERS.
STEM, PERCENTAGE, AND
NG / UP TO 200 STUDENTS

#### ONS

SCREEN OR PRINTER. 75.....NA...NA TO 39 STUDENTS PER 5.....NOW..NA

& ASSIGNMENT INFO/ S/ GENERATES REPORTS ADE TOTALS & AVERAGES, AINTAINS AND REPORTS ON

## 

75.....NOW..\*\*\*\* HAVE SEEN YET; IT CAN N SHORT ORDER AND BRING S EXCELLENT TRAINING LIVEN THINGS UP AND

75.....NOW..\*\*\*+
R WHICH USES A HAPPY O PRESSURE YOU

75.....NOW.NA G. WE LIKE THE PITCH; TO BITS". COMBINES

5/24.95...NOW..NA

................NA....NA

RIES. NA...NA

#### ONS

PRACTICE, OR MASSED THE DETAILED ANALYSIS AS. MINOR COMPLAINT: ASIONALLY LAGS A SPLIT



FIND RELATED MATERIAL.

AUATI RTE

#### QUI CERUI NURUNG PROPERTORS D PRODUCT NAME TYPING STRATEGY / LETTER MAN VENDOR CODE MEDIA PRICE BEH......(D)......34.95 EACH.....NOW..\*\*\*\* BOTH OF THESE TYPING 'TUTORS' USE BEHAVIORAL ENGINEERING'S 'NEURO-LINGUISTIC PROGRAMMING' CONCEPTS TO QUIZMASTER RAY......(T)......9.95.....NOW..NA CREATE YOUR OWN QUIZZES OF ANY LENGTH ON ANY SUBJECT. "...INDUCE THE STRATEGY OF EXCELLENCE" IN THE USER". WHILE THE TENETS OF NEURO-LINGUISTIC PROGRAMMING ARE EASYQUIZ 64 MILDLY CONTROVERSIAL, AND BY NO MEANS A CORNERSTONE OF ESTABLISHMENT PSYCHOLOGY, WE LIKE THE THOUGHTFULNESS OF THE APPROACH (THO WE COULD NOT VERIFY ANY UNUSUAL CBM... ....(D).......19.00......NDW..\*\*\* CREATE LESSONS AND ADMINISTER MULTIPLE CHOICE QUIZZES. QUIZ-KIT BENEFITS TO OUR TYPING SKILLS). SEVERAL OTHER NLP-BASED PROGRAMS ON OTHER SUBJECTS ARE AVAILABLE FROM BEH AT LOG......(T)......14.50......NOW..NA CREATE YOUR OWN QUIZZES OF ANY LENGTH ON ANY SUBJECT. SIMILAR PRICES. SPELL-IT! TYPO LOG......(T)......12.50......NDW..NA ROM......NA...NA....NA...NA CREATE YOUR OWN SPELLING QUIZZES DEVELOP SPELLING AND TYPING SKILLS WHILE ESCAPING FROM MULTIPLE CHOICE AN EVIL SPACESHIP. MWS......(D+T)......29.50......NOW..NA CREATE UP TO 150 QUESTION AND ANSWER SETS PER DISK. ANY PROGRAMMING INSTRUCTION > NUMBER MAY BE EXTRACTED FROM THESE AND SCRAMBLED. TESTS INTRODUCTION TO BASIC: PART 1 MAY BE CONDUCTED VIA THE SCREEN OR PRINTED OUT. CBM......(T)......21.00......NOW...\*\*\* TWO CASSETTES, THOROUGH MANUAL, & FLOW-CHART TEMPLATE (!). WELL DONE PACKAGE TAKES THE BEGINNER THRU THE FUNDAMENTALS WITHOUT TEDIOUS TYPING IN OF EXAMPLE SIM.........(NA)......14.95......NA...NA OMNITEST COMMODORE 64 TUTORIAL VOL. 1 DRILLMASTER CYB......(D)......24.95......NOW..\*\*\* SELF-CONTAINED LESSONS ON DISKETTE (NO MANUAL). INCLUDES STG......(D/T).....17.95......NA...NA QUIZ AND DRILL SYSTEM. COMES WITH STATE CAPITOLS AND INTRO TO KEYBOARD AND 7 INTRO TO BASIC LESSONS VOCABULARY QUIZZES. HES......NDW..NA NEW ADDITIONS PROGRAMMING INSTRUCTION SYSTEM TOU......(D)......89.95......NA...NA COURSEWARE AUTHORING SYSTEM ALLOWS TEACHERS AND PARENTS UNIQUE APPROACH TO GAME PROGRAMMING INSTRUCTION: STEPS USER THRU THE STRUCTURE OF A SAMPLE GAME UNTIL THE USER WITH NO COMPUTER EXPERIENCE TO CREATE CUSTOM COURSEWARE WHICH USES THE ADVANTAGES OF THE COMPUTER WITHOUT IS ABLE TO ALTER OR TOTALLY RE-WRITE THE GAME. STEP BY STEP SACRIFICING INDIVIDUAL STYLE AND METHODOLOGY. PDI......(D)......59.95.....NA...NA GRADUATED INSTRUCTION ON BASIC AND PROGRAMMING TECHNIQUE. ABOUT TWENTY HOURS OF INSTRUCTION WITH GENERAL EDUCATIONAL 2 MATHPAK QUIZZES. LOG......(T)......49.50......NOW..NA 6 PROGRAMS (AVAILABLE INDIVIDUALLY FOR 12.50 EA.): STATISTICS, LINEAR EQUATIONS, DATA AND FUNCTION PLOTTING, FUNCTION ANALYSIS, COMPLEX FUNCTIONS, AND MATRIX OPERATIONS. SOME INCLUDE PLOT AND GRAPHING PROGRAMMING IN BASIC LYN.....(VIDEO TAPE)..49.95......NA...NA CLOSE TO 2 HRS. OF PROGRAMMING INSTRUCTION (BASIC) ON VHS OR BETA CASSETTE. ROUTINES FOR PRINTER. NEW ADDITIONS YOU CAN DO MATH! MTS......(D)......49.95......NOW..NA 64 TUTORIAL VOL. 2 UNIQUE CONCEPT - DESIGNED TO OVERCOME "MATH ANXIETY" BY DETECTING YOUR PROBLEM AREAS AND GIVING THEM SPECIAL WELL DONE TOUR OF THE 64'S SOUND AND GRAPHICS ABILITIES MELL DONE TOUR OF THE 64'S SOUND AND EXAMPLES HOLLITED AND HOW THEY WORK. NO MANUAL IS NEEDED AS THE INTERACTIVE CONTENT OF THE PROGRAM IS TOTALLY SELF-CONTAINED. EXPLAINS RASTER INTERUPTS, BIT-MAPPED AND MULTI-COLOR MODES, SPRITES, COLLISIONS, ALL SOUND PARAMETERS AND MORE. GOES AT USERS PACE AND HIGHLIGHTED BY VERY GOOD GRAPHIC & SOUND EXAMPLES / USER MAY TAKE ATTENTION. ADD/SUB BOS.....(NA).....16.95.....NA...NA SINGLE OR MULTIPLE DIGITS. OPTIONAL PICTORIAL REPRESENTATION. SHOWS BORROWING AND CARRYING. AUDIO FEEDBACK. NUMER-BECI OPTIONAL QUIZES AT THE END OF EACH SECTION/ INCLUDES SPRITE AND SOUND EDITORS WHICH ARE, BY THEMSELVES EASILY BOS......NA...NA NUMBER RECOGNITION / COUNTING / GROUPING / SHAPE, SIZE, & WORTH THE PRICE OF THE PROGRAM. NUMBER DISCRIMINATION C64 TUTOR CSS......(?).....29.95......NA...NA TUTORIAL LESSONS PLUS SCREEN DISPLAY EDITOR, SPRITE EDITOR, MUSIC SYNTHESIZER, AND PROGRAMMER'S CALCULATOR (HAS HEX, BINARY, AND DECIMAL FUNCTIONS). THE MATH TEACHER CTC.....(T)......39.95.....NOW..\*\*\* FIRST GRADE THRU 9TH. ( + - \* / ) MATH TUTOR CODEPRO-64 K-6 ADDITION AND SUBTRACTION ..... (D/T)......59.95.... 'ABC' COVERS PROGRAMMING IN BASIC, GRAPHICS, & MUSIC. INCLUDES SPRITE AND MUSIC EDITORS AS WELL AS DEMONSTRATION PROGRAMS. ONE UNIQUE FEATURE IS THE ABILITY TO SEARCH THRU THE TUTORIAL USING KEYWORDS TO THO......(D/T)......21.95/18.95.....NA...NA THE ALPHABET FOR PRESCHOOLERS. GRAPHICS AND SOUND PINBALL MATH TAY.........(D/T)......24.95/19.95....NA...NA

#### ERG-CARD CENTERFOLD DEBUT:

WE ARE PLEASED TO INTRODUCE THIS NEW FEATURE IN INFO-64! EACH ISSUE WILL CONTAIN A REMOVABLE CENTERFOLD OF REFERENCE MATERIALS WHICH WE HOPE WILL LESSEN YOUR TRIPS TO THE BOOK-SHELF FOR CHARTS, APPENDICES, AND CODE SUMMARIES. IF YOU ARE THE PROUD OWNER OF AN INFO-64 ERGBOARD (SEE NEXT PAGE FOR DETAILS). YOU WILL FIND THAT THESE CENTERFOLDS MAY BE TRIMMED INTO INDIVIDUAL CARDS WHICH WILL FIT HANDILY (& NOT ACCIDENTALY) IN THE REFERENCE WINDOW OF YOUR ERGBOARD, SUPPORTED BY THE STIFF CARDS THAT CAME WITH IT. WE HAVE STARTED WITH CONTROL SUMMARIES OF TWO VERY POPULAR PRODUCTS AND ADDED A BASIC REFERENCE CARD FOR GOOD MEASURE

#### GEMINI-1ØX™ PRINTER CONTROL CODES COPYRIGHT @ 1983 BY CYBERTECH ERG-CARD FOR THE INFO-64" ERGBOARD PRINTER CONTROL CODES (DECIMAL VALUES FOR CHR\$(X) FORMAT! 27:42:1 15/143.....COMPRESSED PRINT MODE 17/145.....SELECTS PRINTER 0/128.....ENDS TAB SETTINGS 7/135.....SOUNDS BUZZER 8/136.....PRINTS BUFFER DATA AND 18/146.....CANCELS COMPRESSED MODE 19/147.....DESELECTS PRINTER MOVES PH ONE SPACE LEFT 9/137.....PRINT AT NEXT TAB SETTING 20/14B.....CANCELS DOUBLE-WIDE MODE 30/158.....ENDS MACRO INSTRUCTION 127/255.....DELETE LAST CHARACTER SENT 10/138..... ONE LINE PAPER FEED 11/139.....FEEDS PAPER TO NEXT VERTICAL TAB. DEFAULTS TO

```
nin2mim2...DEFINES DOWNLOAD CHARACTER
INTO RAM
27;36;1.....SELECTS DOWNLOAD CHAR. SET 27;36;0.....CANCELS DOWNLOAD CHAR. SET
27:45:1.....TURN ON UNDERLINING
27;45;0..... CANCELS UNDERLINING
27:48.....CHANGES TO 1/8" LINE FEEDS
27;49.....CHANGES TO 7/72 LINE FEEDS
27;50.....CHANGES TO 1/6" LINE FEEDS
27:51:n.....CHANGES LINE FEEDS TO n/144
              (n=1 TO 127)
27;52.....SELECTS ITALIC CHARACTERS
27:53.....CANCELS ITALIC CHARACTERS
```

27;55;n	SELECTS INTERNATIONAL CHAR
	(FOR n: 0=USA / 1=ENGLAND
	2=GERMANY / 3=DENMARK
	4=FRANCE / 5=SWEDEN
27.51	6=ITALY / 7=SPAIN )
	DVERRIDE PAPER-OUT SWITCH RE-ENABLE PAPER-OUT SWITCH
27.41	SETS BTH BIT TO LOGIC-0
	SETS 8TH BIT TO LOGIC-1
	COMPLETELY RESETS PRINTER
27.33	SELECTS MACRO INSTRUCTION
27,07,0	ONE VERTICAL FEED: n LINES
	ONE HORIZ. TAB: n COLUMNS
	CHANGES LINE FEEDS TO n/72
27,00,11.111	(n=1 TO 127)
27.66.1	10 CHARACTERS PER INCH
	12 CHARACTERS PER INCH
27:66:3	17 CHARACTERS PER INCH
27:67:0	17 CHARACTERS PER INCH SETS FORM LENGTH TO n LINE
-,,-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(n=1 TO 127)

```
27;67;0;n....SETS FORM LENGTH TO n IN.
               (n=1 TO 32)
27:68:n:n:0..CLEARS CURRENT TAB & SETS
               NEW TABS. (N=1 TO 255)
27;69.....SELECTS EMPHASIZED MODE
27:70.....CANCELS EMPHASIZED MODE
27;71.....SELECTS DOUBLE-STRIKE MODE
27;72......CANCELS DOUBLE-STRIKE MODE
27;74;n....ONE LINE FEED OF n/144"
27:75:n1:n2..480 DOT PITCH BICS MODE
               (# OF COLUMNS = n1+n2$255)
27:76:n1:n2..960 DOT PITCH BICS MODE
               (# OF COLUMNS = n1+n2*255)
27:77:n....SETS LH MARGIN
27;78; n.....SKIP OVER PERF n LINES
27;79.....SKIP OVER PERF 0 LINES
27;80;n;n;0..SETS VERT. TAB POSITIONS
27;81;n.....SETS RH MARGIN
27;82; n.....SETS HEADER POS. (n=1-16)
27; 43; 30.... DEFINES MACRO INSTRUCTION
```

27;83;0SELECTS SUPERSCRIPT MODE 27;83;1SELECTS SUBSCRIPT MODE 27;84CANCELS SUPER/SUBSCRIPTS
27;83;1SELECTS SUBSCRIPT MODE
27;84CANCELS SUPER/SUBSCRIPTS
27;85;1SELECTS UNIDIRECTIONAL MODE
27;85;0CANCELS UNIDIRECTIONAL MODE
27;87;1SELECTS DOUBLE-WIDE PITCH
27;87;0CANCELS DOUBLE-WIDE PITCH 27;89;1ENABLES BUZZER
27;89;0DISABLES BUZZER
27;121
nin2mim2DUAL-DENSITY GRAPHICS WITH
DOUBLE-SPEED
27:122
nin2mim2GUADRUPLE-DENSITY GRAPHICS
GEMINI-10X
IS A TRADEMARK

STAR MICRONICS INC.

## BASIC REMINDER AND SYNTAX CHECKER

TO BUFFER

27:35.....ACCEPTS BTH BIT 'AS IS'

27/155.....ESCAPE: INITIATES REMAINING

27; 42: 0..... COPIES FONTS FROM CHARACTER

CONTROL CODES IN THIS LIST

ROM INTO DOWNLOAD RAM

## ERG-CARDT FOR THE INFO-64T ERGBOARDT

EVERY 6TH LINE 12/140.....FEEDS PAPER TO START OF

NEXT PAGE

14/142.....TURNS ON DOUBLE-WIDE MODE

13/141.....PRINTS BUFFER

ABS....A=ABS(X) AND.... IF A=B AND C=D THEN 10 ASC....A=ASC(X\$) ATN....A=ATN(X) CHR\$....A\$=CHR\$(X) CLOSE...CLOSE A CLR....CLR CMD....CMD X CONT...CONT COS.... A=COS(X) DATA....DATA A, "B", C

DEF FN. DEF FNA(X)=N\*(B-X) DIM.... DIM A\$(X), A3(X, Y, Z) END....END

EXP....X=EXP(A) INPUT".....": X\$

FN.....PRINT FNA(X) FOR.....FOR X=0 TO 100 FRE....PRINT FRE(X) GET....GET N\$ GET# ... GET#1, A\$ GOSUB...GOSUB 750 GOTO....GOTO 750 IF....IF X<>0 THEN 100 INPUT...INPUT X INPUT#..INPUT#1, A INPUT#1"...."; X\$ INT....A=INT(X)

COPYRIGHT (C) 1983 BY CYBERTECH LEFT\$... A\$=LEFT\$(X\$.X) LEN....A=LEN(X\$) LET....LET X=1 (OPTIONAL) LIST...LIST LIST -1000 LIST 400-LIST 200-1000 LOAD...LOAD"NAME" LOG....X=LOG(A) MID\$....X\$=MID\$(A\$,N,A) NEW....NEW NEXT....FOR X=1 TO 50:NEXT X NOT....N=NOT X ON....ON N GOTO A.B.C.D

OPEN...OPEN A, B OR....IF X=1 OR B=0 THEN 10 PEEK....X=PEEK(N) POKE....POKE X.A POS....A=POS(X) PRINT...PRINT A; B\$: "XYZ" PRINT#..PRINT#N, A; A\$; "XYZ" READ ... READ A. B\$ REM....REM...COMMENTS.... RESTORE.RESTORE RETURN. . RETURN RIGHT\$.. A\$=RIGHT\$(X\$.X) RND....X=RND(N) RUN....RUN **RUN 1000** SAVE.... SAVE "NAME" SGN....A=SGN(X) SIN....A=SIN(X)

SPC....PRINT SPC(X) SQR....A=SQR(X) ST.....X=ST STEP....FOR X=0 TO 10 STEP 5 STOP....STOP STR\$....A\$=STR\$(X) SYS....SYS(X) TAB....PRINT TAB(X) TAN....X=TAN(N) THEN.... IF X<> 0 THEN 100 TI....X=TI TI\$....TI\$="HHMMSS" TO.....FOR X=0 TO 100 USR....USR(X) VAL....A=VAL(X\$) VERIFY .. VERIFY "NAME" WAIT....WAITX, Y, Z .....C= D ? .....? "NAME"; A



# CODE SUMMARY FOR HORDPRO 3 PLUS/64™

## ERG-CARDT FOR THE INFO-64T ERGBOARDT

## \*\*CONTROL CODES\*\* ( ) = SHIFTED KEY

CTRL>A.....APPEND FROM EXTRA TEXT (CTRL)B.....PRINT VARIABLE BLOCK (CTRL)C.....CLEAR TAB CTRL>(0)....EXIT TO BASIC CTRL>DS.... DELETE SENTENCE CTRL>EA....ERASE ALL (CTRL)EL....ERASE LINE <CTRL>F.....FIND STRING
<CTRL>G.....GOTO LINE #:

(CTRL>H.....HUNT (CONT. SEARCH) (CTRL) I..... FILL VARIABLE BLOCKS CTRL>K.....CLEAR ALL TABS CTRL>L.....DUPLICATE LINES IN RANGE CTRL>N.....NUMERIC MODE TOGGLE (CTRL)O.....OUTPUT +C = CONTINUOUS OUTPUT

+XN= OUTPUT N COPIES +L = PRINT VARIABLE BLOCKS FROM EXTRA TEXT (CTRL)R.....SETS RANGE OF LINES CTRL>S....SET TAB
CTRL>T....TRANSFER RANGE OF LINES
CTRL>V.....APPEND VARIABLE

# COPYRIGHT (C) 1983 BY CYBERTECH

CTRL>X.....SWITCH TO/FROM EXTRA TEXT CTRL>Z.....ENTER LIST DELIMITER A SECOND DRIVE (CTRL); ....SPECIAL CHARACTER (SENDS CONTROL CODE TO PRINTER) (CTRL), ....READ ERROR CHANNEL (CTRL): ....DISK WEDGE MODE (CTRL)-.....HYPHEN SYMBOL (CTRL)(1)....UNDERLINE ON (CTRL)(1)....UNDERLINE OFF (CTRL)8.....BOLD TYPE ON (CTRL)9.....BOLD TYPE OFF (CTRL)←....FIND VARIABLE BLOCK (CTRL)↑....EMPTY A VARIABLE

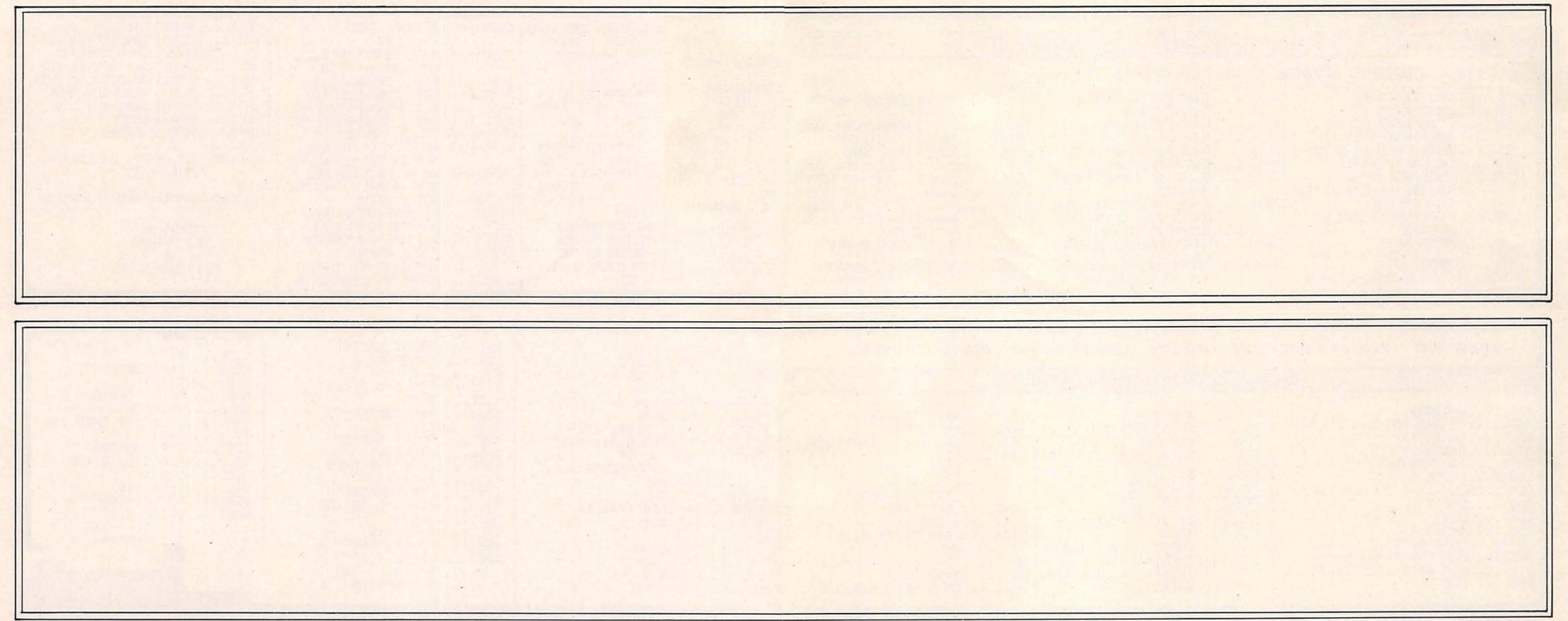
(CTRL>HOME...HOME DATA (CTRL) (R/S) .. RESTART (CTRL>0.....DIRECTORY DRIVE 0 (CTRL)4.....SUBSCRIPTS (CTRL)CRS/RT.RESTART GLOBAL FIND (CTRL)@L....REPLACE LOCAL (CTRL)@G....REPLACE GLOBAL <CTRL>=.....COLUMN ADD/SUBTRACT (CTRL>?or/...FORMAT CHECK MARK CTRL>DEL...LINE DELETE (CTRL)INST...LINE INSERT (CTRL)£....AUDIO ON/OFF ((CTRL))...INSERT MODE ON/OFF (CTRL)F1...CHARACTER COLOR (CTRL)F3...SCREEN COLOR (CTRL)F5...BORDER COLOR £.....LINE READ (ALSO TOGGLES ALL-CAPS)

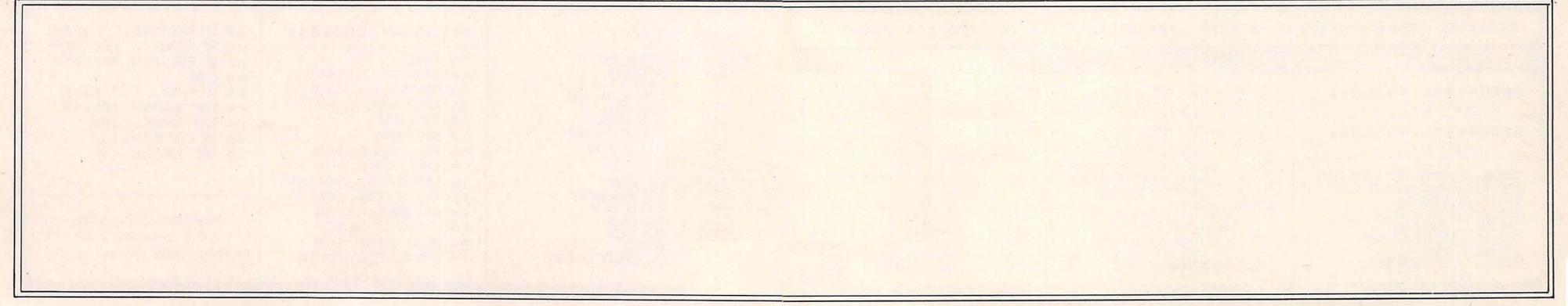
## \*\*FORMAT CODES\*\*

C m COMMENT CD CENTERING......1=ON 0=OFF f a FORM ADVANCE .... 4,6,8,12 f p FORCED PAGING.... (1-255) ft PAGE FOOTER hd PAGE HEADER h 1 HEAD L. MARGIN...1-165 hr HEAD R. MARGIN...2-165 ju JUSTIFICATION....1=ON 0=OFF 1 f ADD LINE FEEDS...1=DN 0=OFF 1 m LEFT MARGIN.....1-165 1 n LINE FEEDS.....1-255 ma MARSIN RELEASE...1-165 TX LINK NEXT FILE ... FILENAME

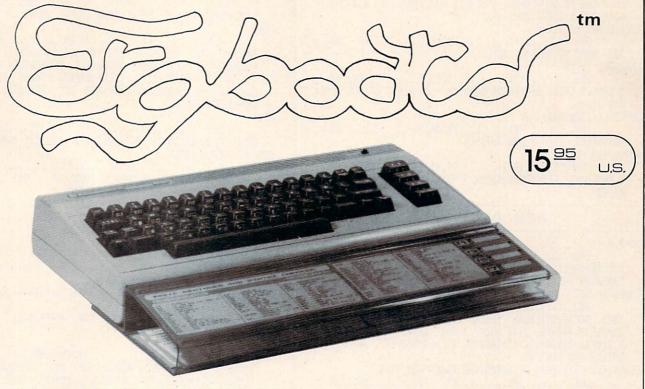
D# SET PAGE NUMBER.. 2 OR GREATER pg SET PAGING ..... LESS THAN PP PP SET PAGE LENGTH .. PAGE LENGTH PS PAUSE pt SET PITCH......8,10,12,15 ra RIGHT ALIGNMENT .. 1=ON 0=OFF r m RIGHT MARGIN....2-165 SP SET LINE SPACING. 1, 2, 3 VP VERT. POSITION...1-PP

WordPro 3 Plus/64 is a trademark of Professional Software Inc.





Introducing: The INFO-64



- \*\* REDUCE FATIGUE 2 WAYS !!

  1) PUTS HANDS IN NATURAL POSITION

  - 2) ERG-CARDS REDUCE EXCESSIVE REACHING FOR REFERENCE MANUALS
- \*\* ADDS CLASS TO YOUR C64!!
- \*\* FREE REFERENCE CARDS IN EVERY CENTERFOLD OF INFO-64!!
- \*\* STYLISH SMOKE-BRONZE ACRYLIC!!
- \*\* COMES WITH 2 SLIDE-IN REFERENCE CARDS!!
- \*\* MAKES AN IDEAL GIFT FOR 64 OR VIC OWNERS!!
- \*\* "IT'S ERGONOMIC!"



The INFO-64 ERGBOARD:	
SEND ME ERGBOARD(S) @ \$15.95 +\$3 HANDLING ENCLOSE CHECK OR MONEY-ORDER PAYABLE TO: INFO-64 PO BOX 958 AUBURN, WA 98071	EACH.
NAME:	
ADDRESS:	
CITY: STATE: ZIP:	
(Washington residents add 8% tax)	

"IT'S ERGONOMIC

GENEREDUCATOONAL (CONTED)	ALGEBRA ARCADE WEP(D)49.95NDW****
TRIVIA!	GRAPHING OF ALGEBRAIC EQUATIONS (UP TO 40 CHARACTERS) IN
DIG(T/D)14.95/19.95NOWNA YOUR CHOICE OF GENERAL & MOVIES / SCIENCE & HISTORY /	HI-RES ON COORDINATE SYSTEM. GAME-MODE HAS YOU ZAPPING 'ALGEBROIDS' WITH THE GRAPHS OF EQUATIONS YOU WRITE.
LITERARY & QUOTATIONS.	MUCH MORE FUN AND USEFUL THAN IT MAY SOUND.
VOCABULARY MASTER  GAT(T)20.00NANA	STAT MES(D)24.95NANA
500- WORD VOCABULARY BUILDER.	PACKAGE FOR TEACHING STATISTICS INCLUDES: BINOMIAL
LANGUAGE TUTOR DIG(T)14.95NOW.NA	FREQUENCIES, CONFIDENCE INTERVALS, COMPARISON OF MEANS, CHI-SQUARE, CORRELATION COEFFICIENT, LINEAR REGRESSION,
3 LEVELS EACH; GERMAN OR SPANISH - OR ALL 3 ON ONE DISK	CENTRAL LIMIT THEOREM, ANALYSIS OF VARIANCE, AND BAR
FOR 29.95. CONSTELLATION QUIZ	GRAPH GENERATOR.
GAT(T)15.00NANA	MES(D/T)19.95/14.95NANA
ASTRONOMY LESSONS AND QUIZZES EDUCATION PAK	DRILL PROGRAM COVERS DECIMALS AND NEGATIVE NUMBERS.
COMPUTERMAT. (D/T)29.95/24.95NDWNA	PIO(D)29.95NOWNA
4 PROGRAMS: GEOGRAPHY MATCH / MATH ADVENTURE / RULER /	DESIGN AND STORE COMPLEX FORMULAE/ USE 64 LIKE PROGRAMMABLE SCIENTIFIC CALCULATOR.
	'MASTER MATH' SERIES (\$1-6)/(\$150.00 FOR SET)
NEW ADDITIONS	PMI(D)30.00 EACHNOWNA
64-S.A.T.	2- ALGEBRA & SETS
AID PROSPECTIVE COLLEGE ENTRANTS IMPROVE S.A.T. SCORES/	3- AREAS & VOLUMES 4- TEST PROBLEMS: FACTORS, INTEREST, TRIG, CALCULUS,
CONTAINS A COMPLETE 18-HR. S.A.T. PREPARATION COURSE.	PERCENTS, BASES AND EXPONENTS
COMPUTER SAT HBJ(D)79.95NANA	5- TEST PROBLEMS: ALGEBRA, GEOMETRY, STATISTICS, RATIOS, EXPONENTS
1000 VOCAB-BUILDING FLASH CARDS/ 540 DRILL ITEMS/	6- TEST PROBLEMS: GEOMETRY, LCM, MAPPINGS, FRACTIONS,
COMPLETE 470 PG. TEXT BOOK/ 4 FULL-LENGTH EXAMS/ SCORES & TIMES/ DIAGNOSES STRENGTHS & WEAKNESSES/ PRESCRIBES	ALGEBRA, CURRENCY. C-64 WORLD CLOCK
DRILLS AND REVIEWS.	RAK(D/T)10.95/7.95NANA
LEARNINGWARE/WIZARD OF WORDS/THE GAME SHOW (ETC.)	SHOWS HI-RES GRAPHIC WORLD MAP AND CALCULATES WORLD TIMES/ CORRECTS FOR DAYLIGHT SAVING TIME & PLOTS
CAI(D)NANANANANANANA	APPARENT POSITION OF SUN RELATIVE TO EARTH.
INCLUDE COLOR ANIMATION, BUILT-IN LIBRARY OF SUBJECTS, AND AUTHORING FEATURES FOR INDIVIDUAL TAILORING. FREE	FAST FOURIER TRANSFORM
BACKUP DISK & GUARANTEED. (WE ARE INTRIGUED WITH THE	RED(D)*79.95NANA (* 59.95 FOR STUDENTS/PROFESSORS) FOR STUDYING OR USING
GAME-SHOW FORMAT OF THREE OF THESE PACKAGES- THE STUDENT BECOMES A GUEST ON A TV GAME SHOW PRESUMABLY MASTERING	THE FFT./ MULTI-MODE INPUT, TRANSFORM, SAVE, AND HI-RES DISPLAY PLUS UTILITIES AND SAMPLE DATA CASES.
THE SUBJECT IN THE COURSE OF PERFORMING WELL ON THE 'TV	COLLEGE PAK
SHOW'- SOUNDS LIKE A GREAT APPROACH!) EARLY GAMES SERIES	USE(D)29.95NANA 25+ PROGRAMS ASSIST IN STUDY OF COLLEGE-LEVEL MATH,
CSI(?)NANANA	PHYSICS, CHEMISTRY, ENGINEERING, LANGUAGE, HISTORY, &
FUN LEARNING ACTIVITIES FOR 2 1/2 TO 12 YRS. THESE USE PICTURE MENUS AND GRAPHICS AND COVER SHAPE, NUMBER, &	MEDICINE.
LETTER EXPOSURE/ MUSIC/ ELEM. MATH/ FRACTIONS ETC.	EDUCATIONAL COMPETIONS NO
ROMAN NUMERALS CRQ(R&D)79.95NANA	PRODUCT NAME VENDOR CODE MEDIA PRICE AVAIL RTG.
CLASSROOM PACKAGE INCLUDES INSTRUCTOR NOTEBOOK AND	
STUDENT HANDOUTS. THE VISIBLE SOLAR SYSTEM	64 PUBLIC DOMAIN CBM(D)250.00NDW***
CBM(R)(15.00NOW***+ GRAPHIC TOUR THRU THE SOLAR SYSTEM INTRODUCES MANY	646 PROGRAMS ON 52 DISKS WITH INDEX. COVERS BROAD RANGE
PLANETARY CONCEPTS EFFECTIVELY AND COLORFULLY.	OF SUBJECTS AND AGE-GROUPS. MOSTLY EDUCATIONAL WITH SOME ENTERTAINMENT, ADMINISTRATIVE, AND DEMONSTRATION
THE SPEED READER II (2 DISKS) DAV(D)69.95NANA	SELECTIONS. NOT ORIGINALLY AVAILABLE TO INDIVIDUAL CONSUMERS, EXCEPT THRU SCHOOLS AND CLUBS, THE SET IS
HIGH SCHOOL, COLLEGE, & ADULTS.	BEGINNING TO SHOW UP FOR SALE AT SOME DEALERS NOW.
ADVANCED MATHER SCIENCE >	EDUCATIONAL ASSORTMENT MED(T)from 7.95NDW***
PRODUCT NAME	150+ SELECTIONS: GRADES K THRU COLLEGE. LIMITED USE OF
VENDOR CODE MEDIA PRICE AVAIL RTG.	GRAPHICS: THESE ARE MOSTLY RE-WRITES OF OLDER PET PROGRAMS
NUMBER CRUNCHER HIN(D)59.95NOW***+	EDUCATIONAL ASSORTMENT
MENU-DRIVEN STATISTICAL PACKAGE: USER BUILDS DATABASE OF	MGR(T)12.95-EANOWNA OVER 100 PROGRAMS ON WIDE RANGE OF ACADEMIC SUBJECTS
UP TO 3000 LABELED ITEMS/ FOURTEEN TRANSFORMATIONS AVAILABLE/ HANDLES MISSING VALUES/ SECTIONS INCLUDE:	GRADES 1 - ADULT. PRICES COME DOWN FOR SIX OR MORE
UNIVARIATE & BIVARIATE STATISTICS, SCATTER PLOTS,	SELECTIONS. DISKS AVAILABLE FOR EXTRA CHARGE. EDUCATIONAL ASSORTMENT
FREQUENCY TABLES & HISTOGRAMS, T TESTS, ONEMAY ANALYSIS OF VARIANCE, MULTIPLE REGRESSION, STEPWISE REGRESSION, &	P6I(T)8.95NANA
CHI-SQUARE CONTINGENCY TABLE ANALYSIS. CHARACTER	FOR AGES 3-9, SOUND AND GRAPHICS, MOST INTERFACE WITH PEI'S EDUMATE LIGHT PEN. ENTIRE SET AVAILABLE ON
GRAPHICS ONLY- WOULD BE MUCH NICER WITH HI-RES GRAPHING.	DISKETTE FOR \$79.95

# EDU. COLLECTIONS (CONT'D)

EDUCATIONAL ASSORTMENT

MPH......NA...NA

GRADES 4 THRU COLLEGE. ALL SUBJECTS INCLUDING SAT ANALOGIES, ANAGRAMS, CALCULUS, PHYSICS, AND CHEMISTRY.

#### NEW ADDITIONS

EDUCATIONAL ASSORTMENT

RSL......(D/T)......19.95 TO 49.95..NA...NA GRAMMAR, PHONICS, ELEMENTARY MATH, FUN PACKS (EDUCATIONAL GAMES).

ASSORTED EDUCATIONAL

DAB.....(D/T).....29.95 TO 39.95.NA...NA
AGES 3 TO COLLEGE/ WELL-ROUNDED SELECTION/
SELF-DIRECTING PROGRAMS NEED NO ADULT SUPERVISION/
SELF-CORRECTING & SELF-MOTIVATING. (WE ESPECIALLY LIKE THE SOUND OF 'DISCOVER' FOR 3-5 YRS. AND 'PERPLEXITY'-PROBLEM SOLVING, LOGIC, & ORGANIZATIONAL SKILLS FOR 7 YRS.+)

#### GRAPHICS



DRAWN WITH INKWELL SYSTEMS' "FLEXIDRAW" LIGHT-PEN

PRODUCT NAME VENDOR CODE

MEDIA

PRICE

AVAIL RTG.

SORCERER'S APPRENTICE

EHS.....(D)......49.95......NOW..\*\*\*
SEE REVIEW FALL '83 ISSUE

'64 GRAFIX SAMPLER

MID......(T)......19.95......NOW..\*\*
SIMPLE SPRITES AND SIMPLER HIGH-RES. ROUTINES. THE
PUBLIC DOMAIN STUFF GOING AROUND IS MUCH MORE IMPRESSIVE.

'64 PENCIL

DUN......(D/T).....24.95.....NA...NA
M.L. HIGH-RES DRAWING. SINGLE-KEY COMMANDS / JOYSTICK
'PENCIL' / 10 SPEEDS / BLOCK DUPLICATION / ERASE / 1525 PRINTER DUMP / SAVE TO DISK OR TAPE

SCRIBBLER

SNX......(T)......35.95......NOW..NA
HIGH-RES. DRAWING IN MULTI-COLOR MODE, MAGNIFY, PAINT, & CIRCLE COMMANDS; JOYSTICK REQUIRED.

PAINT WIZARD

DM0......(R/D).....( 40.00......NOW..NA DRAW ON THE SCREEN. AUTOMATIC CIRCLES, LINES, PATTERNS.

OMN.....(T/D).....29.95......NOW..NA
MACHINE LANG. DRAWING ROUTINES INCLUDE PAINT & ERASE
WITH 8 BRUSH SIZES, DUPLICATE, ENLARGE, REDUCE, REVERSE,
MIRROR. MENU- DRIVEN / COLOR NOT SUPPORTED.

DELTA DRAWING

SKETCH PAD 64

\*WORKS LIKE A SPIROGRAPH AND AN ETCH-A-SKETCH... SAVE TO DISK. "SLIDE- SHOW" MODE.

SCREEN-GRAPHICS-64

ABA......(T/D)......24.95/27.95.....NOW..NA
ADDS 20+ COMMANDS TO BASIC ALLOWING SIMPLE MEANS FOR
DRAWING POINTS, LINES, BOXES, AND SPRITES. DISPLAYS CAN BE SAVED TO TAPE OR DISK.

'64 PANDRAMA

MID......(T)......19.95......NA...NA
19 PRE-DIGITIZED DRAWINGS AS WELL AS A HIGH-RES. DRAW
ROUTINE FOR JOYSTICK AND DUMP TO CBM PRINTER.

#### NEW ADDITIONS

PRODUCT NAME VENDOR CODE

MEDIA PRICE AVAIL RTG.

PENWARE

INK......(D).....150.00......NOW..\*\*\*\*
COMPREHENSIVE LIGHT-PEN DRAWING PACKAGE INCLUDES
HI-QUALITY LIGHT-PEN/ SEE REVIEW THIS ISSUE.

GRAFIX-ARTIST

SPH.....(D).....39.95.....NOW..\*\*\*
INCLUDES JOYSTICK DRAWING ROUTINES AS WELL AS A PROGRAMMING MODE AND SELF-RUNNING DEMO MODE WITH WHICH THE USER MAY MAKE A CUSTOM "SLIDE-SHOW" PRESENTATION/ 16 COLDRS/ HELP SCREENS/ SAVE DRAWINGS TO DISK. LACKS AUTOMATIC SHAPES (CIRCLE, BOX, ETC) AND HAS NO ZOOM OR MAGNIFICATION FACILITIES

3-D GRAPHICS DEVELOPMENT PACKAGE.

PIO.....(D).....(100.00......JAN..NA 2-D OR 3-D DRAWINGS EASILY CONSTRUCTED/ FINISHED DRAWING CAN BE VIEWED FROM ANY PERSPECTIVE, EVEN FROM 'INSIDE' 3-D OBJECT LOOKING OUT! FINISHED 'FRAMES' MAY BE SHOWN IN SUCCESSION FOR 3-D ANIMATION (UP TO 1/2 HOUR-LONG SEQUENCES). ROUTINES MAY BE LINKED TO OTHER PROGRAMS, & FRAMES MAY BE EDITED WITH THE KOALA PAD OR A LIGHT-PEN FOR EXCEPTIONAL FLEXIBILITY.

PICTURE PERFECT

MME......(D)......24.95......NOW..NA
JOYSTICK DRAWING/ 15 COLORS/ AUTO CIRCLES, LINES, BOXES/ MIX WITH TEXT/ SAVE PICTURES TO DISK

COLORING BOOKS 1 & 2

KOA.....(D).....24.95 EA.....NOW..NA
PRE-DRAWN DESIGNS WHICH MAY BE COLORED IN USING THE KOALA-PAD.

LOGO DESIGN MASTER

MEGA DRAW

MEG......(D/T).....15.95/12.95....NA...NA
16 COLOR 'HI-RES' DRAWING - JOYSTICK OR KEYBOARD, HARDCOPY.

SLIDE SERVICE FOR KOALA PICTURES

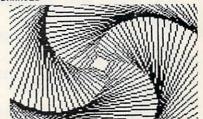
VIS.....NA.....NOM..NA
THIS OUTFIT WILL MAKE COLOR SLIDES OF YOUR KOALA-PAD
SCREENS. SIMPLY MAIL IN THE DISKETTES CONTAINING THE
PICTURES YOU WANT...GET BACK SLIDES!

COMPUTER CRAYONS

PLA.....(D/T).....29.95.....NA..NA
'ELECTRONIC COLORING BOOK' READY TO PAINT PICTURES ON THE SCREEN PLUS ROUTINES FOR DRAWING YOUR OWN: AUTO LINES, CIRCLES, BOXES, ERASING/ STORE & SAVE.

TRI GRAPH

TRI......NA...NA
SKETCH IN COLOR/ CREATE CHARTS/ ANIMATE CHARACTERS/ BUILD SHAPE-SCREEN LIBRARIES



PLOTTING PRINTER GRAPHICS	SPRITEWRITER PIX(T)18.95NOWNA
PRODUCT NAME VENDOR CODE MEDIA PRICE AVAIL RTG.	SPRITE FUN 64 ENT(NA)30.00NANA SPRITE GEN
QUICK CHART ABA(D/T)17:95/14.95NOWNA	FAN(D/T)17.95/15.95NANA
PRESENTATION CHART- MAKER  MATH GRAPH SIM	SPRYTEBYTER  FOX (D/T) 34.95/29.95 NOW. NA  MENU-DRIVEN / SUPPORTS MULTI- COLOR / JOYSTICK OR  KEYBOARD / M.L. ROUTINES / OVER 60 COMMANDS / ROTATE,  INVERT, OBVERT, SYMMETRY, AND/OR, REVERSE, MOVIE ETC. /  CREATE UP TO 128 SPRITES PER FILE. INCLUDES 'GAMEMAKER'  ROUTINE TO AID GAME DEVELOPMENT.  SPRITEMAKER  GTR (T) 10.00 NA NA  SUPER SPRITE  LIT (D) NA NA NA  MULTI-COLOR CHAR. EDITOR  JUS (D/T) 21.95/19.95 NA NA  CREATE YOUR OWN CHARACTER SETS. LOAD AND SAVE / 192  CHARS. AT A TIME / ROTATION AND SHIFTS / CURSOR  CONTROLLED
PRINTING.	NEW ADDITIONS
NEW ADDITIONS	SPRITEMASTER 64
THE GRAPHICS ASSISTANT RAI(D)	ACC(D)35.95NOW****  JOYSTICK OR KEYBOARD SPRITE CREATION/ MULTI-COLOR/ SAMPLES INCLUDED/ ANIMATION ROUTINES INCLUDED/ SPRITES MAY EASILY BE APPENDED TO USER PROGRAMS.  CHARACTER GENERATOR/EDITOR WEO(D)24.95NANA  "POWERFUL HI-RES GRAPHICS & TEXT THRU REDEFINED CHARACTERS."  SPRITE GENERATOR WEO(D)24.95NANA  GAME DESIGNER 64 ENT(D/T)35.95NANA  DESIGN GAME CHARACTERS, BACKGROUNDS, SCREENS/ ANIMATE UP TO 16 SPRITES/ LINK WITH OTHER PROGRAMS/ COMBINES WITH ENTECH'S STUDIO 64 (FOR ADDING SOUND ROUTINES).  SPRITE GRAPHICS DEV. PACKAGE TSI(D/T)19.95NANA  EDIT 128 NORMAL OR MULTI-COLOR SPRITES/ 'HELP' FEATURE/ 35 COMMANDS/ MACHINE CODE ROUTINES/ 32 SPRITES
SERVIZZEHARAGUER EDITORS >	DISPLAYABLE AT ONE TIME.
PRODUCT NAME	PRODUCT NAME
VENDOR CODE MEDIA PRICE AVAIL RTG.	VENDOR CODE MEDIA PRICE AVAIL RTG.
SPRITE DESIGNER  ACA	SOUND SHAPER  QUA(T/D)9.95/11.95NOW***  KEYBOARD CONTROL OF SOUNDS. ALL FEATURES OF SID MAY BE MANIPULATED FROM GRAPHIC SCREEN MENUS. SOUNDS ARE AUTOMATICALLY CONVERTED INTO READY TO USE POKES AND DATA STATEMENTS FOR YOUR OWN PROGRAMS AT THE PUSH OF A KEY.  NOTE PRO I  ELI(D/T)27.95/24.95NOW***  SIMILAR TO NOTE PRO II BUT WITHOUT TRANSPOSE AND ARRANGE / 4 OCTAVES / ONE MEASURE INPUT DISPLAY / NO FILE JOIN NOTE PRO II  ELI(D/T)49.95/46.95NOW***  HIGH SPEED PLAY / 8 MEASURE TREBLE CLEF INPUT DISPLAY / VARIABLE DURATIONS / LEGATO OR STACCATO / TRANSPOSE / B OCTAVE / RE-SEQUENCE / SID CONTROLS / FILE JOINING / TONE PRESETS  NOTE PRO BRIDGE  ELI(D/T)27.95/24.95NOWNA  M.L. SUBROUTINE WHICH MAY BE COPIED AND ADDED TO USER'S PROGRAMS ALLOWING ACCESS FROM BASIC TO NOTE PRO FILES. FULL DOCUMENTATION.
SPRITE WRITER	

ACS......(NA)......19.95/24.95....NOW..NA

MUSIC (CONT'D) >	PERSONAL ENGICE HEIGHT FREE FOR
THE STAFF	SELF-DISCOVERY >
PMS(T/D)14.95/19.95NOWNA	
"POLYPHONIC MUSIC EDITOR AND GENERATOR. ENTER UP TO 93	DIET CALC
MEASURES OF 3 PART HARMONY ON EASY TO USE GRAPHIC	MYS(D/T)24.95/19.95
DISPLAY."	TELL THE COMPUTER WHAT YOU ATE AND WHAT YOU DID, AND IT
SYNTHY-64	WILL CALCULATE YOUR GAIN (OR LOSS)
ABA(T/D)29.95/32.95NDWNA	
CREATES VARIOUS SOUNDS AND MELODIES WITHOUT POKES VIA	NEW ADDITIONS
SIMPLIFIED COMMANDS ADDED TO BASIC.	
(6502 machine code listing25.00)	MODEL DIET
(manual only	SFSNANANANA
MUSIC MAGIC	"ANALYZES YOUR DIETBASED ON GOVERNMENT
ACS(T/D)19.95/24.95NOWNA	RESEARCHTRACKS CALORIE INTAKE"
DIRECT KEYBOARD CONTROL OF SOUNDS.	AEROBICS
	SPI(D)NANANA
EARLY GAMES MUSIC	LEADS YOU THROUGH WARM-UPS, STRETCHES, AEROBICS, &
COU(NA)NANANA	COOL-DOWN.
ASSORTMENT OF GAMES THAT INTRODUCE 4 TO 12 YEAR OLDS TO	TOTAL HEALTH
THE BASICS OF MUSIC.	CSA(NA)(38.00
MUSIC MAKER	GUIDE TO DIET & EXCERCISE: MONITOR FOOD INTAKE/ PLOT
COM(D/T)24.95/19.95NOWNA	EFFECTS OF VARIOUS EXCERCISE & EATING COMBINATIONS/ DATA
ENTER SHEET MUSIC NOTES FOR PLAYBACK IN 3 VOICES.	ON 200 FOODS INCLUDES COVERING CALORIES, CARBOHYDRATES,
INCLUDES SAMPLE TUNES.	SODIUM, FAT, AND PROTEIN/ CALCULATES DAYS TO REACH
MUSIC MAKER 64	WEIGHT GOAL BASED ON USERS PLAN.
ENT(NA)39.00NANA	BIORHYTHM+
SUPER 64 MUSIC MAKER	NLI(T)14.50NANA
SEY	CLASSIC BIORHYTHM WITH AUDIO FEEDBACK & COMPATABILITY
PLAY, MODIFY, SAVE, AND LOAD MUSIC.	COMPARISONS/ GENERATES PRINTOUTS.
DELTA MÚSIC	EXPANDO-VISON PROGRAMS
SPI(R)NANANA	STI(NA)39.95 EANANA
	SUBLIMINAL PROGRAMMING SYSTEM (REQUIRES \$89 INTERFACE).
	CHOOSE FROM 8 PROGRAMS: WEIGHT CONTROL/EXERCISE,
NEW ADDITIONS	SMOKING/CALM NERVES, STRESS/POSITIVE THINKING,
WINTONIA	DRINKING/RESPONSIBILITY, ATHLETIC CONFIDENCE/GOLF, STUDY
MUSICOMP	HABITS/MEMORY, CAREER/SUCCESS, SEXUAL CONFIDENCE.
CDA(NA)39.95NANA	SYSTEM FLASHES MESSAGES TO YOUR TELEVISION FOR 1/30
COLOR GRAPHICS/ MENU MODE/ BASIC-LIKE CODE EDITOR/ SHEET	SECOND WHILE WATCHING YOUR FAVORITE SHOWS - TOO FAST TO
MUSIC ENTRY/ 50 PG. MANUAL.	NOTICE, BUT LONG ENOUGH TO BE ABSORBED BY THE
INSTA-MUSIC	SUBCONSCIOUS, MESSAGES MAY BE VIEWED IN SLOW-MOTION IF
CIMNANANANA	YOU WANT TO KNOW WHAT YOU'VE BEEN 'READING'.
WRITE, STORE, PLAY MUSIC.	THE HYPNOTIST
MUSICWRITER - 64	PSY(D/T)87.95/79.95NANA
DEEDECNA	INTENDED FOR SELF-ADMINISTERED BEHAVIOR MODIFICATION/
FROM THE MAKERS OF " M'FILE": CREATE, EDIT, PLAY 3-VOICE	PROGRAM YOUR OWN POST-HYPNOTIC SUGGESTIONS/ INCLUDES
MUSIC/ COMPLETE CONTROL OF SID CHIP/ GENERATES SHEET	PSYCOM'S BIOFEEDBACK DEVICE.
MUSIC	PERSONALITY ANALYZER
STUDIO 64	PSY(D/T)32.95/S7.95NANA
ENT	ANALYZE SELF & OTHERS REGARDING PERSONALITY TYPE, CAREER
GENERATES GRAPHIC DISPLAY OF NOTES AS YOU PLAY/ 3	POTENTIAL, TENDENCIES, COMPATIBILITIES ETC REQUIRES
VOICES/ VARIABLE SPEED PLAYBACK/ PRINTS LEAD SHEETS.	JOYSTICK.
SONGWRITER	I-CHING PROGRAM
SCA(NA)39.95NANA	CY6(D/T)29.95/24.95NANA
SIMULATED PIANO ROLL GRAPHICS/ WRITE, EDIT, VARIABLE	HAVE YOUR 64 'THROW' AND INTERPRET HEXAGRAMS FROM THE
TEMPO PLAYBACK/ COMES WITH 28-SONG LIBRARY.	ANCIENT CHINESE 'BOOK OF CHANGES'
EAR-TRAINER	1964
HOR(D)29.95NANA	SNS(D/T)24.95/19.95NANA
6 PROGRESSIVE LEVELS TO HELP YOU SING ON-KEY!	45-MINUTE, 60-QUESTION PROGRAM FOR AGES 9 & UP TESTS AND
DANCING FEATS	CALCULATES IN/ INCLUDES EXPLANATIONS/ CLAIMS TO HELP
SFS(NA)NANANA	IMPROVE IN TEST PERFORMANCE.
"THE ONE-MAN JOYSTICK BAND": CREATE, SAVE, PLAYBACK	MISCELLANEOUS >
MUSIC.	
	PRODUCT NAME
MICHAEL STORY OF THE STORY OF T	VENDOR CODE MEDIA PRICE AVAIL RTG.
M-SKIRIS	1000000000000000000000000000000000000
	PRO-BOWL NA NA NA
	ACS(D)199.95NANA
	RECORD KEEPING AND HANDICAPPING FOR BOWLING LEAGUES
	(WE WOULD ADD 'WELL-FUNDED' BOWLING LEAGUES)
	BASKETBALL STATS
	MNS(D)39.50NANA

MNS.....(D).....39.50.....NA...NA
MENU-DRIVEN AID FOR COACHES: TRACK 18 PLAYERS THRU 30
5AMES / REPORTS ON FIFTEEN STATISTICS (ELEVEN ARE
PRE-DEFINED) / PRINTER SUPPORTED



44

SKIER 64

21			===
----	--	--	-----

œ	HEE	arieous		ONT (D)	Œ
FOOTBALL	SCOUT	(0)	70 FA	NANA	
SET T				YZE OTHER TEA	
OFFEN	ISE / UP T	D 50 PLAYS P	ER GAME STOR	ED / 6 GAMES	MAY
				PORT. 3 REPOR SH- DOWN- DISTA	
CHART		13, IEMPENDI	Lo, ZUNL III	JII DOWN DISTR	HUL
ASSORTED	RANGE OF	PROGRAMS	D GATALOGY	NA NA	
ASSORTE	RANGE OF	PROGRAMS	IK CATALUB)	NANA	REEL
NOOUNTEL	PTM	(NA)	NA	NANA	
		NEW AD	DITION	 S	
PRO-GENY	ACS	(?)	49.95	NANA	
GENEA	LOGY PROG	RAM/ CONFORM	IS TO LDS S	TANDARDS/ RECO	RDS
				EACH GENERATIO	N.
are			ios Gi		
PRODUCT	NAME CODE	MEDIA	PRICE	AVAIL F	RTF.
VENDOR	LUDE	ПЕВІН	TRICE	nvnie '	
JUMPMAN			70.05	NON 1	
(SEE	"GALLERY"	FALL ISSUE	39.93	NOW*	***
	MIDNICHT	MACTO			
	BRO	(D)	34.95	NOW*	***+
GRIDRUN		FALL ISSUE	• )		
DRIDNON	HES	(R)	39.95	NDW*	***
		FALL ISSUE	.)		
MOTOR M	ANIA	(D/T)	29 95	NOW*	***
(SEE	"GALLERY"	FALL ISSUE	.)		^^^
FR066ER	CIE	(7)	74 05	NOU .	
(SFF	"GALLERY"	FALL ISSUE	54.95	NOW*	***
REPTON					
NUM	SIR	EIRST-DATE	39.95	E GAME! M.L.	***
				OUND, AND	
FEAT	URES.				
FURI AP	DCALYPSE	(D/T)	34.95	NOW*	+++-
	YOUR JET	COPTER DOWN		AND CAVE.	
ARCA RETRO B		JOYSTICK.			
KEIKU D		(R)	39.95	NOW*	**+
	AIR-HOCKE	Y SIMULATIO	N, JOYSTICKS	REQ'D.	
PAKACUD	cuc	(T/D)	10 05/23	.95NOW*	
(SEE	"GALLERY"	FALL ISSUE	.)		жжт
CENTROP		/T /D)	10.05/07	DE NOU	
CENT	IPEDE THE	ME/ M.L. / J	19.95/23	.95NDW	**+
NEUTRAL	ZONE	Local Training			
DEED	ACC	ADAT/ ALL M	34.95	NDW*	**
(360	DEG.) / 3	S-D REALISM	/ GREAT SOUND	EFFECTS.	LIND
KONGO KI	DN6				
RULI	ING BARREI	S. LADDERS	* THE FAMOUS	FORTULA	**+
ATTACK	OF THE PHA	ANTOM KARATE	DEVILS		
	PHA	(D/T)	34.95	NOW	
LOVE	(-BELTED W	ARRIOR UP A	IAL-ARTS TH	NINJAS. PUNCI	YOUR
	LEADE	CUNTOULLED	BY INVETIC	K/ LOOK OUR	FOR
KICK	& LEAPS	COMINDELED	DI 0013110	KI LOUK DUN	
ASSO	RTED DEADL	Y PROJECTILE RY' THIS ISSE	ES. 600D SPRI	TE ANIMATION.	

KILLER PILLER
CAS(D/T)12.75/9.99NOW***+ SIMILAR TO 'CENTIPEDE' WITH SOME INTERESTIN TWISTS/ GOOD GRAPHICS AND SOUND (NO. THE PRICE IS NOT A MISPRINT). (SEE 'GALLERY' THIS ISSUE)
LASER STRIKE ISI(D/T)29.95/24.95NDW***+
ORIGINAL GRAPHICS ADD APPEAL TO THE FAMILIAR CRUISE, SHOOT, & BOMB THEME.  (SEE 'GALLERY' THIS ISSUE)
FAST EDDIE SIR(D)34.95NOM***
CUTSIE GAME GETS OLD FAST. NONETHELESS, THE GRAPHICS ARE SMOOTH AND EVERYTHING WORKS.
SUS(T/D)25.95/27.95NOW*** SUB-HUNT GAME WITH GAUGES AND A SONAR SCREEN. RUNWAY 64
SUS(T/D)25.95/27.95NOW*** INSTRUMENT-BASED FLIGHT SIMULATOR GAME. NOT ANIMATED. ANNIHILATOR
VCT(NA)19.95NOW*** SMART-BOMBS & BLASTERS, ANIMATION CANDY-MAN
STA(T)24.95NOW***  MUNCH THRU THE FAMILIAR MAZE. M.L. W/ SCROLLING WINDOW.  USES KEYBOARD GRAPHICS.
COM(T)24.95NOW***  3 GA,ES: HEAD ON, ALIEN INVASION, & TARGET COMMAND.  GAME PAK
COM(T)14.95NOW*** 3 GAMES: DRAGON CHASE, DEFLECT, & FLIP-IT. CRUSH-CRUMBLE-CHOMP
EPY(D)29.95NOWNA DINOSAURS VISIT YOUR CITY- YOU ASK THEM TO LEAVE. EVOLUTION
SDP (NA)NANANA
99 LEVELS, ARCADE SOUND & GRAPHICS. PROTECTOR II/ SHAMUS/ THE PHARAOH'S CURSE/ SURVIVOR/ SLAM BALL/ DRELBS
SYN(T/D)34.95 EANOWNA HIGH-RES. M.L. ANIMATED ARCADE GAMES.
TWERPS/ TURMOIL/ DEADLY DUCK/ FANTASTIC VOYAGE/ ALPHA/ BLADE OF BLACKPOOL/ CRITICAL MASS/ SNAKE BYTE/ SPIDER CITY/ SQUISH/ TYPE ATTACK SIR(NA)39.95 EANOWNA
SIR THE TANK
"BLADE OF BLACKPOOL"
SPORE WAR
DIG(T/D)14.95/19.95NOWNA ARCADE SHOOT-EM-UP. MAZE-BLOCKADE
DI6(T/D)14.95/19.95NOWNA
COLLISION TOP(T/D)12.95/15.95NDWNA
RENEGADE F-16/ FIREFIGHTER/ MONEY MINEFIELD/ MOONLANDER/ PEDESTRIAN LUN(NA)19.95 EANOWNA
SUBWAR 64
CCI(D/T)23.95/19.95NOWNA SUB-HUNT SIMULATION GAME WITH GAUGES, PERISCOPE VIEW, AND SONAR. STELLAR TRIUMPH
INT(NA)24.95NONNA

ABA......(T/D).....14.95/17.95....NOW..NA
JOYSTICK OR KEYBOARD. SOUND & SPRITES.

ARCADE GAMES	NAME OF THE PERSON OF THE PERS
SHOOTING GALLERY	
M.L. ARCADE GAME.	21.95NOWNA
SEAWOLFE AAR(D/T) M.L. SEA- WAR GAME / JOYSTICK.	24.95/19.95NANA
ZEUS  AAR(D/T)  M.L. / THUNDERBOLTS, GODS, & SI	
LAZER BLAZER ACS(D/T)	24.95NANA
FAST-MOVING CYCLE GAME/ JOYSTII 4-GAME PACK ADA(D/T)	29.99NANA
SERPENTS/ ATOMIC MAN/ ALIEN IN VOYAGER 64 BIL(D/T)	
M.L. MULTI- SCREEN. MISSION 64 BRI(T+D)	
SPACE SHOOT-EM-UP / JOYSTICK OF SERPENTINE	R KEYS.
BRO(R) M.L. HUNGRY SNAKES / JOYSTICK, CHOPLIFTER	
BRO(R)A POPULAR HOME ARCADE GAMES. N	
ATTACK OF THE MUTANT CAMELS	
HES(R) SEQUEL TO 'GRIDRUNNER' / FAST OF CRAZE / LOGGER / SUPERCUDA / MCP	AND FUN / JOYSTICKS.
CDC(D/T) MOONDUST / TRASHMAN / ASTROBLITZ REQUIRE JOYSTICK)	/ SAVE NEW YORK (ALL
CRE(R)POOYAN / MOON SHUTTLE DAS(D)	
AIR STRIKE / JET BOOT JACK / VENU / MONSTER SMASH	S VOYAGERS / TOPSEE TURVEE
SHOOTING GALLERY EME(NA)	
ALL-STAR BASEBALL / PITSTOP EPY(NA)	NANANA
STAR LEAGUE BASEBALL  GAM(NA)	
ARMADA / INTERCEPTOR	P. Harlis Stein, Street, C. W. H. S.
VOYAGER 6TR(T)	
FINAL CONFLICT MIS(NA)	287-112-1180
ROADTOAD / CHICKEN CHASE M&B(T)	19.95NANA
M.L. / HI-RES COLOR GRAPHICS & 3-D MAN NUF(T)	19.95NOW***
HOW PAC-MAN WOULD LOOK FROM TH / JOYSTICK. KOOKY CLIMBER	
REN(D/T)	
REN(D/T)	
SIE(D/T)	
SNX(D/T) ALL M.L. HI-RES GRAPHICS & SOU SKI-RUN / BUNNY	31.95/27.95NANA JND.
STC(T)	.20.80 EANANA

	45
METEOR	
ZWARK STC(T)	12.00NANA
SWC(D/T) ALL M.L. HI-RES / SPRITES /	24.95/19.95NANA SOUND
SPACE SENTINEL	29.95NANA
SPRITE & CHAR. GRAPHICS WITH SUICIDE STRIKE / JUICE / KID GR	3-VOICE SOUND.
TRO(NA)	34.95 EANANA
VCT(NA) FIRE ANTS AND KILLER BEES	19.95NANA
WIZ(D/T) ALL M.L. / 2-PLAYER MULTI- L	24.95/22.95NANA
NEW ADD	
NEW HDD	T 1 T O N O
PRODUCT NAME VENDOR CODE MEDIA	PRICE AVAIL RTG.
G*BERT	
ABSOLUTELY FAITHFUL RENDITION	
THE 64 VERSION SURPASSES ALL SOUND, GRAPHICS AND GAME-PLAY	OTHERS/ SUPERB ANIMATION,
(SEÉ 'GALLERY' THIS ISSUE) DONKEY KONG	
THE ORIGINAL NINTENDO ARCADE	44.95NDW****
BY ATARI! IF YOU NEED THIS BEEN OFF THE PLANET FOR THE L	GAME DESCRIBED, YOU HAVE
64 VERSION OUTSHINES EVEN THE	
(SEE 'GALLERY' THIS ISSUE)	
ONCE AGAIN. A COMPLETELY CONV	
CLASSIC, WITH ALL THE NUANCES ROBOTRON: 2084	
IF YOU LIKED IT IN THE ARCADE	.44.95NOW***** ES, YOU'LL BE HAPPY WITH
THIS ATARI CONVERSION OF THE (SEE 'GALLERY' THIS ISSUE)	WILLIAMS GAME FOR THE 64.
PAC-MAN ATA(R)	.44.95NDW****
IT'S THE 'REAL' THING. WHAT HARD HAT MACK	ELSE CAN WE SAY?
ELE(D) ENTERTAINING ARCADE GAME, ALO QUITE AS GOOD AS 'JUMPMAN'.	.35.00NDW***
QUITE AS GOOD AS 'JUMPMAN'.	ind the cines or, but not
FROGGER PAR(R)	.NANOW****
AGAIN, A VERY 600D TRANSLATIO	IN OF A POPULAR ARCADE GAME.
BEACH-HEAD ACC(D) FIRST-RATE NAVAL BATTLE S	34.95NA***
FIRST-RATE NAVAL BATTLE S SCREENS, SMOOTH 3-D MAC	SIMULATION WITH MULTIPLE CHINE-LANG. ARCADE-GUALITY
ANIMATION AND SOUND. (SEE 'GALLERY' THIS ISSUE)	
WAYNIT	39.95NDW****
BEST 3-D MAZE GAME WE HAVE SE	EN/ FLOWING ANIMATION/ FREE





BANDITS
SIR......(D)......39.95.....NOW..\*\*\*\*
GOOD SPACE GAME OF THE 'GALAXIAN' GENRE.

[ +0 ] = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 =
ARCADE GAMES (CONT'D) >
METAMORPHOSIS
VCT(D/T)19.95NOW***+ MULTI-SCREEN GAME REMINISCENT OF 'ROBOTRON'
(SEE 'GALLERY' THIS ISSUE)
PURPLE TURTLES
QUI(T)29.95NOW***+ ENTERTAINING WELL-ANIMATED NON-VIOLENT GAME HAS YOU
CROSSING A STREAM ON THE BACKS OF UNPREDICTABLE DIVING
TURTLES (SORT OF LIKE 'FROGGER' IN CROSS-SECTION) (SEE 'GALLERY' THIS ISSUE)
GALACTIC BATTLES
CYB(D)19.95NOW***+ THIS SPACE ARCADE GAME HAS SOME OF THE MOST UNUSUAL AND
PLEASING SOUND-EFFECTS WE HAVE HEARD ON THE 64. NICE
GRAPHICS. (SEE 'GALLERY' THIS ISSUE)
SUPERCYCLES
PIO(D)31.95NOW***+
'TRON' THEME/ DRIVE YOUR LIGHT-CYCLE PAST THE BADDIES WITHOUT RUNNING OUT OF FUEL/ TWO SCREENS/ JOYSTICK.
(SEE 'GALLERY' THIS ISSUE)
TOWERING INFERNO PIO(D)34.95NOW***
THIS IS A CUTE GAME: CATCH THE LEAPING CHARACTERS IN
YOUR FIREMAN'S NET/ LOOK OUT FOR THE LARGE ONES, THEY'LL
SQAUSH YOU! (SEE 'GALLERY' THIS ISSUE)
GRIDDER
MDG(D/T)24.95/19.95NOW*** MOVE ALONG THE VARIOUS GRIDS, AVOIDING THE TWO BADDIES.
(SEE 'GALLERY' THIS ISSUE)
WORMS ELE(D)35.00NOWNA
UNIQUE GAME IN WHICH PLAYERS (UP TO 4) PROGRAM THEIR
COLDRFUL, MUSICAL "WORMS" TO TAKE OVER AND DOMINATE THE GAME GRID. THE 64 WILL PLAY THE PARTS OF ANY MISSING
PLAYERS.
AXIS ASSASSIN ELE(D)35.00NDWNA
SURVIVE THE WEB-SPINNING 'MASTER ARACHNID' AND RESCUE
EXTRA MEN FROM ITS NEST.
ATA(R)44.95NDWNA
ATARI IS ESPECIALLY PROUD OF THIS CONVERSION TO THE 64/ I LIKE THIS GAME IN THE ARCADES AND AM LOOKING FORWARD
TO 'TESTING' THE HECK OUT OF IT ON A 64!
DEFENDER
ATA(R)44.95NOWNA ONE OF THE BEST ARCADE GAMES OF ALL TIME. I COULD HAVE
BOUGHT A 64 WITH THE QUARTERS I SPENT ON THIS ONE(I'M
GLAD ATARI SPENT SOME OF MY QUARTERS ON THE R&D TO BRING THIS OUT ON CARTRIDGE FOR THE 64!)
JUMPMAN JR.
SEQUEL TO THE POPULAR "JUMPMAN"/ ADDS MANY MORE SCREENS,
PUZZLES, AND CHALLENGES.
SNDKIE FUN(D/T)34.95NANA
15-SCREEN ARCADE GAME WITH GOOD-LOOKING COLOR GRAPHICS
AND A FRIENDLY LOOKING PENGUINOID IN THE STARRING ROLE.
FLIP AND FLOP FIR(NA)NANANA
600D-LOOKING GRAPHICS IN THIS NEW ARCADE GAME.
WATERLINE TRD(D)NANANA
RESCUE PASSENGERS AND GOLD FROM YOUR SINKING SHIP.
QUEST OF THE EAGLE FER(D/T)28.75NANA
PERHAPS THE ONLY SOFTWARE YET TO COME OUT OF CEDAR
RAPIDS 10WA/ AN INTERESTING- LOOKING STAR-TREK TYPE SPACE GAME.
STHUE CHIC.

NIGHT MISSION PINBALL
SUB......(D)......49.95......NOW..NA
AWARD-WINNING PINBALL SIMULATION WITH TEN LEVELS OF
PLAY/ ALSO FEATURES AN EDITOR FEATURE FOR CUSTOMIZING
THE GAME.



SAMMY LIGHTFOOT		.NA	
STRATEGY/ PARLOR/ 8	STMUL	ATTON	
PRODUCT NAME VENDOR CODE	MEDIA	PRICE	AVAIL RTG.
(SEE "GALLERY" FA	(T) LL ISSUE)	.29.95	
MORDRACE	.(D/T) 2000 WORDS		NS/ MULTIPLE
==>> ODESTA'S "MIND 2.1 / ODIN ) ARE TRS-80 CIRCLES. ARE THE BEST! (TH IN A CLASSY BOX A CHESS 7.0	HIGHLY REGAR SOON TO BE A E WHOLE SET T A REDUCED	DED IN APPLE, VAILABLE FOR T MAY BE PURCHA PRICE.)	ATARI, AND HE 64, THESE SED TOGETHER
CHECKERS 2.1 ODE		.69.95	
COMPELLO		.49.95	
PST WARRIOR	. (NA)	.17.95/15.95	
==>> AVALON HILL GA FOR THE PET WHICH DNLY). TITLES INC PLANET MINERS / N	RUN FINE ON LUDE: TELENG ORTH ATLANTI	THE 64 (CHARA ARD / ANDROM C CONVOY RAID	CTER GRAPHICS EDA QUEST / ER / MIDWAY

CAMPAIGN / B-1 NUCLEAR BOMBER / DRAW POKER / NUKEWAR / COMPUTER FOOTBALL STRATEGY / COMPUTER STOCKS AND BONDS.

AHG......(T)......16.00 TO 24.00...NOW..\*\*\*

CAS....... (NA)......15.99......NA...NA

6PM......(T)......12.95......NOW..NA

BANDIT (SLOT MACHINE SIMULATION)

CASINO CRAPS

	HELL CAT ACE
STRATEGY/STAULATION	HELLCAT ACE MPS(R/T)29.95NANA
PARLOR/ & CASINO (CONT/D)	3-D COMBAT FLYING SIMULATION.
64 BLACKJACK	WINGMAN / MIG ALLEY ACE MPS(R/T)34.95.EACHNANA
DES(T)18.00NOWNA	"PLAYER VS. PLAYER, HEAD TO HEAD, SPLIT SCREEN 3-D
64 KENO DES(T)16.00NDWNA	COMBAT FLYING SIMULATIONS
ROCKY LARUE'S CASINO	JURY TRIAL NAV(NA)29.00NANA
5AT(T)29.95NANA	YOU ARE THE PROSECUTOR/ THE COMPUTER IS THE JURY/
SLOTS / BLACKJACK / KENO / POKER / CRAPS / & MADAM MAGENTA'S LOUNGE! ALL INCLUDED.	THOUSANDS OF CASES POSSIBLE IN THIS COURTROOM
BACKGAMMON	SIMULATION. SARGON II
STC(T)24.00NANA	HAYNANANA
64 YAHTZEE	ONE OF THE OLDEST COMPUTER CHESS PACKAGES
SPRITES AND SOUND FOR UP TO 10 PLAYERS.	CHAMPIONSHIP GOLF HAY(D/T)NANANA
MONOPOLY	60
MYS(D/T)24.95/19.95NANA KENTUCKY DERBY	HAYNANA
SIM	THE CLASSIC ORIENTAL BOARD GAME.
KONNECT FOUR	STR(D)39.95NOWNA
GPM(T)10.95NOWNA	FLY THE CLASSIC WAR-PLANES, OR DESIGN AND FLY YOUR OWN RINGSIDE SEAT
GTR(T)20.00NANA	STR(D)39.95NOWNA
EUCHRE	SEMI-ANIMATED BOXING SIMULATION- ARRANGE THE MATCH-UPS
HUT(D/T)29.95NANA FOUR HANDED EUCHRE: YOU VS. THE 64- 500D LUCK!	OF THE CENTURY, SEE WHO WOULD HAVE WON.
CRIBBAGE 64	CSINANANANA
LIT(D/T)NANANA	"6000 QUESTIONS EXPLORE YOUR KNOWLEDGE" IN THE AREAS OF
ABA(T/D)14.95/17.95NOWNA	SCIENCE, SPORTS, ENTERTAINMENT, AND POTPOURRI.
SEARCH SERIES	COLLECTIONS
T&F(T)19.95NANA	CURSOR 64 (#1-#5) CUR(T)12.95 EACHNDW***
FIND WORDS IN GRIDS OF LETTERS: 3 PACKAGES, EACH WITH 3 CATEGORIES: WORDSEARCH (CAPITALS/ JUMBLED/ ANIMALS) -	64 COLLECTION (#1 & #2)
SPORTSEARCH (PRO TEAMS/ COLLEGE TEAMS/ SPORT GAMES) -	PUB(T/D)10.00 EACHNOW***
ARCADESEARCH (HOME VIDEO GAMES/ ARCADE VIDEO GAMES/ FAMOUS VIDEO GAME CHARACTERS).	TEXT ADVENTURE GAMES
64 MIND BOGGLER	====>> THE INFOCOM ADVENTURE SERIES ARE THE LEADING TEXT-
DES	BASED ADVENTURE GAMES. THEY ALL INCORPORATE A VERY POWERFUL LANGUAGE INTERPRETER (PARSER) WHICH HAS A
SPELLATHON FAN(D/T)21.95/19.95NANA	VOCABULARY OF ABOUT 600 WORDS, ALLOWING INPUT OF WHOLE AND
WORDLORD	MULTIPLE SENTENCES INCLUDING ADJECTIVES (IE: TAKE THE ROUGH
GTR(T)15.00NANA	OBJECT AND THE LONG DEVICE. PUT THE OBJECT AND THE DEVICE IN THE OPEN CONTAINER.). THIS IS VERY IMPRESSIVE TO
WORD MATCH SIM(NA)14.95NANA	EXPERIENCE AND GIVES AN UNCANNY SENSE OF INTELLIGENCE IN
SCRAMBLERS (3 WORD GAMES)	THE MACHINE. (INFOCOM EMPHASIZES THAT GRAPHICS HAVE BEEN
RAM(T)19.95NANA NUMBER JOTTO	DELIBERATELY OMMITTED TO ENHANCE THE USE OF THE IMAGINATION. WE FEEL IT IS MORE LIKELY DUE TO THE
SIM(NA)14.95NANA	DIFFICULTY & EXPENSE OF WRITING GRAPHICS ROUTINES FOR THE
64 FINANCE	WIDE NUMBER OF SYSTEMS WHICH THEIR GAMES WILL RUN ON NOW. WE FEEL THAT SIMPLE GRAPHIC ON-SCREEN MAPPING WOULD AD
DES(T)20.00NOWNA STOCK MARKET SIMULATION	TREMENDOUSLY TO THESE OTHERWISE EXCELLENT GAMES AND NAIL A
WALL STREET	5-STAR RATING TO BOOT!)
TMW(T/D)24.95NOWNA	ZORK-I
FUR TRAPPER BRI(T)14.95NANA	INF(D)39.95NDW****
HIGH SEAS	THE ORIGINAL ADVENTURE CLASSIC.
BRI(T)14.95NANA	INF(D)39.95NOW****
NEW ADDITIONS	ZORK-III
	INF(D)39.95NOW**** DEADLINE
FLIGHT SIMULATOR II SUB(D)49.95NOWNA	INF(D)49.95NOW****
HI-RES REAL-TIME COLOR ANIMATED FLIGHT SIMULATOR:	YOU ARE THE DETECTIVE SOLVING A MURDER IN THIS EXCITING
PRACTICE TAKEOFFS, LANDINGS, & AEROBATICS IN YOUR PIPER	ADVENTURE. VERY REALISTIC CHARACTERS WITH DISTINCT PERSONALITIES
181 CHEROKEE ARCHÉR, OR FLY INTO A WORLD WAR I DOGFIGHT. INCLUDES 80 AIRPORTS IN N.Y., CHICAGO, SEATTLE, AND	STARCROSS
L.A./ ADJUSTABLE WEATHER CONDITIONS/ COMPLETE	INF(D)39.95NOW***
INSTRUMENTATION.	SCIENCE FICTION THEME. SUSPENDED
	INF(D)49.95NOW****
	(SEE "GALLERY" FALL ISSUE.)

TEXT ADV GAMES (CONTO)	OTHER GAMES
DUNGEONS OF DEATH / ESCAPE FROM MARS / PYRAMID AAR(D/T)19.95/14.95.EANANA	PRODUCT NAME VENDOR CODE MEDIA
TREASURE PAK (ADVENTURE / CAVES OF SILVER / SHUTTLE VOYAGE)  COM(D/T)19.95/14.95NOWNA	UP FOR GRABS SPI(R) FUN CROSSWORD-TYPE PUZZLE FOR
CARNAC CAVERNS LIT(NA)NANA	VARIOUS AGES AND SKILLS. JO GRAPHICS.
EERIE MANSION MYS(D/T)24.95/19.95NANA WHO-DUN-IT / BANSHEE CASTLE	FRACTION FEVER SPI(R)
RAM(NA)19.95 EANANA ADVENTURE PAK 1 (JACK AND THE BEANSTALK / COMPUTER	CRE(R) UNUSUAL GAME WHICH CREATES MU
ADVENTURE / MOON BASE ALPHA VCT(T)19.95NANA ADVENTURE PAK 2 (AFRICAN ESCAPE / HOSPITAL ADVENTURE / BOMB	IN SEARCH OF THE MOST AMAZING TH SPIN(D)
THREAT)  VCT(T)19.95NANA	ANOTHER UNUSUAL GAME WHIC PROBLEM-SOLVING (WITH ALIENS ETC.
NEW ADDITIONS	FACEMAKER SPI(R/D)
INFIDEL/ ENCHANTER/ THE WITNESS/ PLANETFALL INF(D)49.95 EACHNOWNA	STORY MACHINE SPI(R/D)
4 MORE "INTERACTIVE FANTASIES" FROM THE COMPANY THAT WROTE THE BOOK ON INTERACTIVE FANTASY.	SPI(R/D) COSMIC LIFE
GRAPHIC ADVENTURE GAMES > PRODUCT NAME	SPI(R) BABIES OF THE DIRT ENT(NA)
VENDOR CODE MEDIA PRICE AVAIL RTG.	ESCAPE FROM SIMON CITY  6TR(T)
TEMPLE OF APSHAI  EPY(D/T)39.95NOW*****  (SEE "GALLERY" FALL ISSUE.)	MAGGIE ('ARTIFICIAL INTELLIGENCE
UPPER REACHES OF APSHAI EPY(D/T)19.95NOW****	VECTRON SIM(NA) SPACE CADET
EXPANSION MODULE FOR "TEMPLE" ABOVE.  CURSE OF RA  EPY(D/T)10.95NOW****	FAN(D/T) GUNSLINGER
EXPANSION MODULE FOR "TEMPLE" ABOVE. GATEWAY TO APSHAI	FAN(D/T)
EPY(D/T)NANANANA NEWEST SEQUEL TO "TEMPLE" SERIES. SWORD OF FARGOAL	PINBALL CONTRUCTION SET (BILL BU
EPY(D/T)29.95NOW**** "JUNIOR" VERSION OF TEMPLE GAMES. SIMPLER COMMAND	INFO-64'S CHOICE FOR RECREATI MUCH MORE THAN A GAME, WE WAN
INTERFACE FOR YOUNGER OR LESS PATIENT PLAYERS. ROBBERS OF THE LOST TOMB THW(T/D)24.95NOWN.A.	FROM ELECTRONIC ARTS! (WE SHO 'MUSIC CONSTRUCTION SET'- BEL
MARRIOR OF RAS SERIES (DUNZHIN / KAIV / WYLDE / ZIGGURAT) INS(D/T)39.95 EANANA	THE TIME YOU READ THIS. MUSIC CONSTRUCTION SET ELE(D)
REAL-TIME ADVENTURES IN M.L. WITH HI-RES COLOR GRAPHICS, SOUND. GOTHMOG'S LAIR	PROGRAMMING- L
FRG(D/T)39.95NOWNA GYPSUM CAVES	PRODUCT NAME VENDOR CODE MEDIA
ADI(D/T)16.95/14.95NANA THE WIZARD'S TOWER AAR(D/T)19.95/14.95NANA	LOGO CBM(D)
MOUNTAIN KING CBS(NA)NANA	A NATURAL FOR THE 64! VANILLA PILOT
GRAVE ROBBERS  VCT(T)14.95NOW**+	COMAL (D/T) CIG(D)
NEW ADDITIONS	LEN LINDSAY HAS BEEN WRITT RELATIVELY UNKNOWN LANGUAGE FO
MURDER ON THE ZINDERNEUF ELE(D)40.00NOWNA	HIS ENTHUSIASM AND DEDICATION BECOMES AVAILABLE IN IT'S FINA SOUNDS LIKE A VERY WORTHY HIGH
PIO(D)36.95NONNA GRAPHICS ADVENTURE GAME IS SORT OF A CROSS BETWEEN	STRUCTURED, SUPPORTING GRAPH WHICH MAY YET TAKE A PLACE B
'TRIVIAL PURSUIT', AND DUNGEONS AND DRAGONS. ADVANCE THRU THE GAME AND FIND THE SIX KEYS USING YOUR KNOWLEDGE OF THE OBSCURE.	PASCAL. FOR A THOROUGH TREATM 'COMMODORE' MAGAZINE- VOL4, NU

GRAPHICS. FRACTION FEVER SPI	1700
SPI	*
MOONDUST	OF OD
UNUSUAL GAME WHICH CREATES MUSIC AND PLEASING GRAPHICS IN SEARCH OF THE MOST AMAZING THING SPIN(D)39.95SEPNA ANOTHER UNUSUAL GAME WHICH EXPOSES CHILDREN PROBLEM-SOLVING (WITH ALIENS), ECONOMICS, NAVIGATIO ETC. FACEMAKER SPI(R/D)34.95NANA STORY MACHINE SPI(R/D)34.95NANA KINDERCOMP SPI(R/D)34.95NANA COSMIC LIFE SPI(R/D)29.95NANA BABIES OF THE DIRT ENT(NA)	*
PROBLEM-SOLVING (WITH ALIENS), ECONOMICS, NAVIGATIO ETC.  FACEMAKER	TO
SPI (R/D) 34.95. NANA STORY MACHINE SPI (R/D) 34.95. NANA KINDERCOMP SPI (R/D) 29.95. NANA COSMIC LIFE SPI (R) NANANA BABIES OF THE DIRT ENT (NA) 35.86. NANA ESCAPE FROM SIMON CITY 6TR (T) 15.86. NANA	
SPI. (R/D) 34.95. NA. NA KINDERCOMP SPI. (R/D) 29.95. NA. NA COSMIC LIFE SPI. (R) NA. NA. NA BABIES OF THE DIRT ENT. (NA) 35.86. NA. NA ESCAPE FROM SIMON CITY 6TR. (T) 15.66. NA. NA	
SPI(R/D) 29.95. NANA COSMIC LIFE SPI(R) NANANA BABIES OF THE DIRT ENT(NA) 35.80. NANA ESCAPE FROM SIMON CITY 6TR(T) 15.00. NANA	
SPI(R)NANA BABIES OF THE DIRT ENT(NA)35.80NANA ESCAPE FROM SIMON CITY 6TR(T)15.00NANA	
BABIES OF THE DIRT  ENT(NA)35.00NANA  ESCAPE FROM SIMON CITY  6TR(T)15.00NANA	
ESCAPE FROM SIMON CITY  6TR(T)15.00NANA	
MAGGIE ('ARTIFICIAL INTELLIGENCE') RAM(T)19.95NANA	
VECTRON SIM(NA)14.95NANA	
SPACE CADET FAN(D/T)17.95/15.95NANA	
GUNSLINGER FAN(D/T)17.95/15.95NANA	
NEW ADDITIONS	
PINBALL CONTRUCTION SET (BILL BUDGE)	
ELE(D)40.00NOW***  INFO-64'S CHOICE FOR RECREATIONAL SOFTWARE OF THE YEAR MUCH MORE THAN A GAME, WE WANT TO SEE MORE OF THIS GO FROM ELECTRONIC ARTS! (WE SHOULDN'T HAVE TO WAIT LON 'MUSIC CONSTRUCTION SET'- BELOW- SHOULD BE AVAILABLE THE TIME YOU READ THIS.  MUSIC CONSTRUCTION SET ELE(D)40.00DECNA	LD 6-
PROGRAMMING- LANGUAGES	2
PRODUCT NAME VENDOR CODE MEDIA PRICE AVAIL RTG	i.
LOGO CBM(D)99.95NDW***	
A NATURAL FOR THE 64! VANILLA PILOT TAM(D/T)29.95NDW****	
COMAL	
CIG(D)15.00NANA LEN LINDSAY HAS BEEN WRITING FERVENTLY ABOUT THI RELATIVELY UNKNOWN LANGUAGE FOR SOME TIME NOW. WE LIN HIS ENTHUSIASM AND DEDICATION AND HOPE THE LANGUAGE BECOMES AVAILABLE IN IT'S FINAL 64 VERSION SOON. I SOUNDS LIKE A VERY WORTHY HIGH- LEVEL LANGUAGE (FAST STRUCTURED, SUPPORTING GRAPHICS AND SOUND DIRECTLY WHICH MAY YET TAKE A PLACE BESIDE BASIC, FORTH, AN PASCAL. FOR A THOROUGH TREATMENT OF THE SUBJECT, SE 'COMMODORE' MAGAZINE- VOL4, NUMBER 3 (FALL '83).	S

PROGRAMMING- LANGUAGES >	CP/M 2.2
C64 FORTH	THEN THE (A TATE A PULL PROCESSES MACHINE BUNNING INDER
PER(D)99.95NDWNA	TURNS THE 64 INTO A DUAL-PROCESSOR MACHINE RUNNING UNDER DIGITAL RESEARCH'S CP/M OPERATING SYSTEM.
FORTH 79 WITH EXTENSIONS, FULL SCREEN EDITOR AND ASSEMBLER, SUPPORTS HI-RES, CHARACTER, AND SPRITE	CP/M EST(R)349.00NANA
GRAPHICS, SOUND CAPABILITIES, FULL I/O, IEEE AND BASIC	TRI FORTH
DATA FILE COMPATABILITY, MANUAL WITH EXAMPLES OF BASIC TO FORTH COMVERSIONS, TRACE FOR DEBUGGING.	TRI(?)NANANANA
FULLFORTH+	PAE(D)89.00NANA
MCT(D)180.80NOWNA ENHANCED FIG FORTH: STRINGS, FLOATING POINT, EDITOR,	SUPPORTS SOUND, HI RES, COLOR, & SPRITES/ "SAVE TURNKEY" GENERATES DISTRIBUTABLE APPLICATIONS DISKS/ CONDITIONAL
COND. ASSEMBLER, INTERPRETER. TARGET COMPILER AVAILABLE	MACRO ASSEMBLER/ SUPPORTS ALL I/O AND 64 PERIPHERALS.
FOR 50.00.	APPLICATIONS GENERATORS >
BSS(D)59.95NOWNA	PRODUCT NAME
FIG FORTH WITH EXTENSIONS: VIRTUAL MEMORY / COMPILED CODE / TEXT EDITOR AND MACRO ASSEMBLER / DISK & PRINTER	VENDOR CODE MEDIA PRICE AVAIL RT6.
I/O / DOUBLE PRECISION MATH / FILE HANDLING WORDS / COMES WITH 400 WORDS.	THE LAST ONE
FORTH	BSS(D)99.95NOWNA THIS PROGRAM IS A PROGRAM THAT WRITES BASIC PROGRAMS FOR
MIN(D/T)37.95NANA FIG-FORTH WITH ASSEMBLER / EDITOR / FLOATING POINT /	THE USER BASED ON THE USERS CONCEPTS WHICH ARE EXTRACTED
GRAPHICS / SOUND / TUTORIAL / SUPPORT. ( ALSO AVAILABLE	BY THE COMPUTER THRU A QUESTION & ANSWER PROCESS. WHEN "THE LAST ONE" HAS ALL THE INFORMATION IT NEEDS, IT
ARE TWO TUTORIALS FOR \$13 EA.: GAMES, GRAPHICS, AND	WRITES THE (SUPPOSEDLY BUG-FREE) PROGRAM! ALSO
SOUND / ARTIFICIAL INTELLIGENCE.) 64 FORTH	GENERATES FLOW CHARTS AND DOCUMENTATION FOR YOUR NEW PROGRAM. IF YOU HAVE AN APPLE II OR IIE, THIS SAME
HES(R)59.95NOWNA FIG-TYPE IMPLEMENTATION WITH FULL-SCREEN EDITOR AND	SOFTWARE COSTS \$395; ON EVERYTHING ELSE IT IS \$495! WE
HORIZONTAL-SCROLLING WINDOW.	HAVE OBTAINED A COPY OF THIS INTERESTING SOFTWARE & WILL REVIEW IT IN A FUTURE ISSUE.
KMMM PASCAL (D)85.00NDWNA	
"TRUE COMPILER THAT GENERATES MACHINE CODE FROM	NEW ADDITIONS
PASCAL SOURCEEDITOR, COMPILER, TRANSLATOR INCLUDED." Z-80 VIDEO PAK ( CP/M )	CODEWRITER
DAT(R&D)299.95NDWNA	DYT(D)NANANA WRITES FINISHED STAND-ALONE APPLICATIONS IN BASIC. 'WORK
CP/M OPERATING SYSTEM AND Z80 MICROPROCESSOR WITH 80-COL. DISPLAY GENERATOR ALL IN ONE PACKAGE.	IN PLAIN ENGLISHDRAW ANY SCREEN LAYOUT, ADD ANY
ACTION	CALCULATIONSOR HELP MESSAGES YOU NEEDCODEWRITER WRITES ALL THE BASIC CODE.
OSS(R)99.00NANA SOON TO BE RELEASED FOR THE 64. CLAIMS TO BE FASTEST	HOME FILENRITER
8-BIT LANGUAGE (OVER 100 TIMES SPEED OF BASIC). 128-	DYT(D)69.00NANA APPARENTLY A HOME VERSION OF CODEWRITER (ABOVE)/ LACKS
COLUMN SCREEN EDITOR / MONITOR MODE / ONE-PASS COMPILER. TURTLE GRAPHICS II	MENU AND REPORT GENERATING CAPABILITIES, THO THESE CAN BE ADDED LATER VIA EXPANSION SOFTWARE.
HES(R)59.95NOWNA	EXTENSIONS TO BASIC >
NEW ADDITIONS	SYSRES
CRYSTAL	SDL(D)95.00NDW****
CYB(D)(60.00	ABSOLUTELY LOADED WITH FEATURES; FAST-SCROLLING/ RE-DEFINE KEYS/ AUTO & RE-NUMBER/ TRUE MERGES/
DEVELOPEMENT LANGUAGE ALLOWS INTERMEDIATE LEVEL BASIC PROGRAMMERS TO CREATE SOPHISTICATED GAMES USUALLY NOT	FIND-CHANGE WITH WILD-CARDS/ SPACE AND REM REMOVAL/ 3
POSSIBLE WITHOUT ASSEMBLY OR MACHINE-LANG. PROGRAMMING	TRACE MODES TO NAME A VERY, VERY FEW. MAY NOT BE SUITABLE FOR THE CASUAL USER DUE TO COMPLEXITY (THO WE
SKILLS. GAIN MASTERY OVER SPRITES, INTERRUPTS, SOUND, ANIMATION, AND MORE. USES NO BASIC & GENERATES	KNOW SEVERAL PEOPLE WHO USE ONLY THREE OR FOUR OF THE
STAND-ALDNE INDEPENDENT CODE WHICH CAN THEN BE RUN ON	SCORES OF COMMANDS AND FUNCTIONS AND FEEL THEY HAVE GOTTEN MORE THAN THEIR MONEY'S WORTH).
ANY OTHER 64. NEVADA COBOL	GRAPHDOS
CBM(D)(60.00NOWNA	INT(D)39.95NANA ADDS 12 DOS COMMANDS / 11 HI-RES GRAPHICS COMMANDS / 5
ZOOM PASCAL ABA(D)39.95NOWNA	LO-RES GRAPHICS COMMANDS / & 12 MISC. COMMANDS TO BASIC.
PRODUCES 6502 MACHINE CODE/ FEATURES: FLOATING POINT,	INCLUDES 20-COMMAND MINI-MON. BASIC AID
INTEGERS, STRINGS, FILE HANDLING. TINY FORTH	MTS(D)29.95NANA
ABA(D/T)27.95/24.95NDWNA	DISK UTILITIES INCLUDE: RENUMBER/ SEARCH & REPLACE/ SUBROUTINE EXTRACT/ PROGRAM MERGE/ LINE NUMBER &
PILOT II TAM(D)49.95NDWNA	VARIABLES CROSS-REF.
ENHANCED VERSION OF VANILLA PILOT: 25 EDITING COMMANDS,	SCREEN GRAPHICS 64 ABA(D/T)27.95/24.95NDWNA
29 TURTLE GRAPHIC COMMANDS, AND 23 PROGRAM COMMANDS/ SIMPLIFIED ROUTINES FOR SPRITES, HIRES, & SOUND/ MIXED	ADDS OVER 20 COMMANDS TO BASIC FOR DRAWING LINES, BOXES, PLOTTING POINTS, MANIPULATING SPRITES. HI-RES &
TEXT AND HI-RES TURTLE GRAPHICS/ INTEGRAL SPRITE EDITOR.	MULTI-COLOR MEDRES. MODES.
	TO STANDED AN OWN WOODS AND ENGINEER THE TAX BEING AND THE PARTY OF TH

EXTENSIONS TO BASIC >
CBM(R)NANOWNA WE ARE HEARING RAVES FROM OUR CANADIAN FRIENDS WHO HAVE USED THIS PACKAGE. ADDS 114 COMMANDS TO BASIC. HI-RES / STRUCTURED PROGRAMMING / MUSIC COMMANDS / & PROGRAMMING AIDS SECTIONS.
NEW ADDITIONS
PROGRAM EDITOR
WEO(?)29.95NANA REWRITE, TROUBLESHOOT & DEBUG: WALKTHRU & QUICKTRACE/ USER-DEFINED FUNCTION KEYS. POWER 64
PRL(D)99.95NANA D.A.M. (DISK ACCESS MANAGER)
CAN(D)99.95NANA PROVIDES FOR ADVANCED DISK-ACCESSING: SUPPORTS SEQUENTIAL ACCESS WITH FIXED AND VARIABLE LENGTH RECORDS/ DIRECT ACCES BY RECORD #/ INDEXED ACCESS/ KEYS TO 256 BYTES/ MULTIPLE INDICES PER FILE/ RECORDS TO 32,000 BYTES/ 65,000 RECORD PER FILE/ MULTIPLE VOLUMES
EXCEDING DISKETTE CAPACITY/ FILE UTILITIES/ INTERFACES TO BASIC, ASSEMBLER, & OTHER LANGUAGES.  ADVANCE SCREEN AND CHARACTER SET WEO
'EXPANDS SCREEN ACCESS. SCROLL 50 ROWS VERTICALLY, 40-120 HORIZONTALLY. FREES 4K OF MEMORY WITH IMPROVED CHARACTER SET'. SUPER BASIC
RTC(D)(35.00NOWNA ADDS: BASIC 4.0 COMMANDS/ ADDS EXTENDED GRAPHICS & SOUND COMMANDS/ ADDS "B"-SERIES BASIC EXTENSIONS
PROGRAMMING ENVIRONMENT >
PRODUCT NAME VENDOR CODE MEDIA PRICE AVAIL RT6.
MAE (MACRO ASSEMBLER EDITOR)
EAS(D)99.95NDWNA COMPLETE 6502 DEVELOPMENT SYSTEM/ WIDELY USED IN THE SOFTWARE INDUSTRY. INCLUDES WORDPROCESSOR. 6502/6510 PROFESSIONAL DEVELOPMENT SYSTEM
HES(T)29.95NOWNA ONE- OR TWO-PASS ASSEMBLER USING STANDARD MOS MNEMONICS AND OPERAND FORMATS. HESMON 64
HES(R)39.95NOW***+ 6502/6510 M.L. MONITOR WITH MINI-ASSEMBLER. MINI-MON
INT(T/D)24.95NDWNA
LHON 44
CMAR 64  CIM(NA)NANANA  DEVELOP 64
CIM(NA)NANANA
DEVELOP 64 FRE(D/T)59.95/54.95NANA
CIM
CIM

edhada:	S		
PRODUCT NAME VENDOR CODE	MEDIA	PRICE	AVAIL RTG.
PETSPEED	(D)	150.00	NOW NO
POPULAR COMPILE CURRENTLY. CBM TINY BASIC COMPILE	APPROVED.	MANY SOFTWA	ARE DEVELOPERS
FLOATING POINT ( 60SUB, 60TO, PR ALL MATH FUNCTION EQUIVALENT 6502 BASM (COMPILER/ AS)	COMPILER SUP INT, REM, RE DNS. PRODUC CODE TO SCR SEMBLER)	ES A COMMENT EEN OR PRINTER	N, END, INPUT, USR, PEEK, AND TED LISTING OF R.
"UP TO 130 T OF BASIC WITH ADDRESSING MODE: DTL COMPILER 64	IMES FASTER ASSEMBLY S."		JSES THE SYNTAX TA TYPES AND
64 COMPILER		100.00	
N	IEW ADI	DITIONS	
BASIC COMPILER	A R. C.		
INSTA-SPEED		29.95	
COPY & B	ACKUP	PACKA	633 1
DISKIT 64			
	(D)	75.00	NANA
FAST SINGLE DISK	BACKUP WIT		
PTE FAST SINGLE DISK 64 DISK CLONE DES ONE-PASS BACKUP COPY CAT 64 (DISK I	( BACKUP WIT (D) FOR 2 SINGL BACKUP W/ UT	H UTILITIES15.00 E DRIVES. ILS.)	NANA
PTE FAST SINGLE DISM 64 DISK CLONE DES ONE-PASS BACKUP COPY CAT 64 (DISK I VIM COPYMAKER	( BACKUP WIT (D)	H UTILITIES15.00 E DRIVES. ILS.)19.95	NANA
PTE FAST SINGLE DISK 64 DISK CLONE DES ONE-PASS BACKUP COPY CAT 64 (DISK I VIM COPYMAKER CGR FAST SINGLE DRIV BACKUP VI.0	( BACKUP WIT (D) FOR 2 SINGL BACKUP W/ UT (D)	H UTILITIES15.00 E DRIVES. ILS.)19.95 UTINE.	NANANANA
PTE FAST SINGLE DISK 64 DISK CLONE DES ONE-PASS BACKUP COPY CAT 64 (DISK I VIM COPYMAKER CGR FAST SINGLE DRIV BACKUP VI.0	( BACKUP WIT (D)	H UTILITIES15.00 E DRIVES. ILS.)19.95	NANA
FAST SINGLE DISK 64 DISK CLONE DES ONE-PASS BACKUP COPY CAT 64 (DISK I VIM COPYMAKER CGR FAST SINGLE DRIV BACKUP VI.0 SWP CASSETTE BACKUP	( BACKUP WIT (D) FOR 2 SINGL BACKUP W/ UT (D) /E BACKUP ROULE ROUTINES.	H UTILITIES15.00 E DRIVES. ILS.)19.95 UTINE.	NANA
FAST SINGLE DISK 64 DISK CLONE DES ONE-PASS BACKUP COPY CAT 64 (DISK I VIM COPYMAKER CGR FAST SINGLE DRIV BACKUP V1.0 SWP CASSETTE BACKUP	FOR 2 SINGLE BACKUP W/ UT(D) (D) (E BACKUP ROUTINES.	H UTILITIES15.00 E DRIVES. ILS.)19.95 UTINE24.95	NANANANANANA
FAST SINGLE DISK  64 DISK CLONE  DES  ONE-PASS BACKUP COPY CAT 64 (DISK I VIM  COPYMAKER  CGR  FAST SINGLE DRIV BACKUP VI.0  SMP  CASSETTE BACKUP  THE CLONE MACHINE MMD  SINGLE & TWIN 15 TYPES, INDIVIDUA (EVEN MANY PROTE ME FOUND THE OPE FASTER THAN MO FEATURES ARE WE DISPLAYED WITH T MADE TO TITLES, OLD TEXT- MANY OF FUNCTION-KEY ASS PROGRAM.  DISK DUPLICATOR	( BACKUP WITH  ( D)  FOR 2 SINGLE  BACKUP W/ UT  ( D)  ( D)  ROUTINES.  LEW ADD  ALLY OR ENTINE  CTED DISKS)  ERATION CONVINION CON	H UTILITIES. 15.00 E DRIVES. ILS.)19.9530.00 UTINE24.95  PITIONS  ROUTINES/ CORE DISK/ EXA/ SUPPORTS UP ENIENT AND DEP DETAILED DI & RECORD INFORMS ETC. BY SIM DINS AVAILABLE (HIS IS MUCH M9.95 Y ROUTINE. 6-	NANDM***

ADVANCE 1500 PRINTER PROGRAM

COPY & BACKUP PACKAGES >
SUPER COPY 64
RTC(D)39.95NOW****  IT IS HARD TO RATE THIS COPY PACKAGE: ON THE ONE HAND, IT IS THE FASTEST WE HAVE SEEN- BACKING UP A FULL DISKETTE IN LESS THAN 10 MINUTES! ON THE OTHER HAND, THE TWIN SINGLE DRIVE OPTION WOULD NOT WORK FOR US AT ALL, NECESSITATING SWAPPING DISKS THRU FOUR PASSESS (THIS STILL BEATS THE 6 PASSESS USUALLY REQUIRED BY CONVENTIONAL BACKUPS). THE OTHER (MINOR) ANNOYANCE WAS THAT WE GENERALLY HAD TO INITIALIZE THE DRIVE TO GET SUPERCOPY TO LOAD PROPERLY. THE SPEED, HOWEVER, IS THE
BOTTOM LINE HERE, & OUTWEIGHS THESE OTHER CONSIDERATIONS.
MISC. UTILITIES >
PRODUCT NAME VENDOR CODE MEDIA PRICE AVAIL RTG.
MENU MAGIC
SIM(NA)19.95NANA DISKETTE FILER SIM(NA)24.95NANA
CASSETTE FILER
PRINTER UTILITY PROGRAMS
CAR(T)19.95NOW****  ALLOWS SCREEN DUMPS TO EPSON, GEMINI, OR PROWRITER PRINTERS. REVERSE DUMPS / FROM PROFRAM OR KEY-TRIGGERED. ALSO PROVIDES FOR PRINTING OF GRAPHICS CHARACTER SET. INCLUDES LARGE-FONT BANNER ROUTINES FOR PRINTER. PET LOADER
ECI(T)23.95NOWNA
PET EMULATOR CBM(D)19.95NOW***+
NEW ADDITIONS
AXE/RECOVER
HAC*(D)23.99NOW****  * THIS IS A COMBINATION HARDWARE & SOFTWARE PRODUCT. THE AXE IS A SMALL CARTRIDGE WHICH PLUGS IN WHERE YOUR MODEM USUALLY GOES- IT HAS A PUSHBUTTON SWITCH WHICH IS PUSHED TO REACTIVATE THE 64 WITHOUT CLEARING MEMORY. THE M.L. RECOVER SOFTWARE ALLOWS RECOVERY OF PROGRAM IN MEMORY AT THE TIME THE AXE IS ACTIVATED. USES: 'UN'NEW A PROGRAM, CIRCUMVENT PROTECTED PROGRAMS (FOR LEGITIMATE PURPOSES OF COURSE) WHICH USE LIST, SAVE, & RUN/STOP DISABLING/ STOPPING 'RUNAWAY' DISKS/ RESTARTING CARTRIDGES & SIMILAR OPERATIONS. DISK SUPPORT 64
H&H(D)14.95NOW***
RE-CREATE  RTC(D)(35.00NOWNA  READS ANY ASCII FILES AND CONVERTS THEM TO FORM READABLE  BY RICHVALE'S "SCRIPT-64" WORDPROCESSOR.  ADDS TWELVE DISK COMMANDS (SIMILAR TO COMMODORE WEDGE).  ADVANCE SERIAL DOS
PROMISES TO LOAD & SAVE PROGRAMS TWICE AS FAST ON YOUR 1541 THRU REPROGRAMMING OF DRIVE.
EZ/DISK SFT(D)29.95NANA
DISK UTILITIES/ SIMILAR FEATURES TO COMMODORE WEDGE. DISK RETRIEVER
H&H(D)9.95NOWNA ALLOWS FOR RECOVERY OF ACCIDENTALLY SCRATCHED FILES AND PROGRAMS FROM DISK. FASTFIND FOR THE DATASETTE
WEO(D)14.95NANA 'LOAD & SAVE PROGRAMS AT 'FAST FORWARD'

SPEEDS OPERATION OF 1515/1525 PRINTER TO 50 CPS. ADDS FULL DESCENDERS.' SOFTLOC SFP......(D)......29.95.....NA...NA
WITH THIS PACKAGE, USERS MAY MODIFY THEIR DISKS TO BE
COPY- & LIST-PROTECTED. 3 SYSTEMS: 7-DIGIT ACCESS CODE, ENCODED PROGRAMS, MODIFIED DISKETTE DIRECTORY. TELECOMPUTING PRODUCT NAME VENDOR CODE MEDIA PRICE AVAIL RTG. SMART 64 TERMINAL MTS......NDW..\*\*\* USER-DEFINED PARAMETERS (BAUD, PARITY ETC.) / COMPILED BASIC/ ONE-KEY LOG-ON / UP & DOWN-LOAD / 28k SAVE BUFFER / BASIC TO TEXT TO BASIC CONVERSION / PRINTER SET-UPS / BUILT-IN WEDGE COMMANDS / TIMER / WORDPRO- COMPATIBLE FORMATTED END-OF-LINE / ENTIRE 28K BUFFER DUMPS TO DISK IN 3.5 MIN. / VISUAL INDICATION OF BUFFER SPACE REMAINING / ECHO OF TRANSMITTED DATA / SPECIALLY DESIGNED TO OPTIMIZE ACCESS TO COMPUSERVE & COMMODORE'S COMPUSERVE DATABASE. (THIS IS THE WAY YOU GET FREE SOFTWARE WITH YOUR MODEM.) KTERM VERSION 2 KAT......(NA)......14.95......NOW..\*\*\*\*

30K SAVE BUFFER/ LISTABLE BASIC/ AUDIBLE KEY-CLICK/
KEEP- DISCARD KEYS/ ONE-KEY LOG-ON / UP, DOWN-LOADING. .. (NA)......29.95..... MID .. SMOOTH SCROLLING/ 24K SAVE BUFFER/ FULL-SPEED XMIT AND RECEIVE/ MENU SELECTABLE TERM. CONFIGURATION (PARITY, BAUD, ETC)/ DUMP TO PRINTER OR SCREEN ONLY. (NO UP/DOWN LOAD) AVCOR VIDEOTEX SOFTWARE PACKAGE AVC.....(D)..UNDER 100.00..... THIS PROMISES A WHOLE NEW DIMENSION TO TELECOMPUTING AS WE KNOW IT NOW. NAPLPS COMPATIBLE COMMANDS IMPLEMENTED INCLUDE: DOMAIN/ TEXT (SUBCOMMANDS; ROTATION, PATH, INTER-CHARACTER SPACING, INTER-ROW SPACING, CHARACTER FIELD DIMENSIONS) / TEXTURE/ SET COLOR/ SELECT COLOR/ WAIT/ RESET/ POINT/ LINE/ ARC/ RECTANGLE/ POLYGON/ FIELD/ INCREMENTAL POINT/ UNDERLINING/ CANCEL/ NULL/ 8 & 7 BIT MODE/ UNPROTECTED FIELDS. INTERPRETS INCOMING COLORS TO THE NEAREST 64 COLOR. USES FULL 320 X 200 HI-RES. PERMITS EITHER 300 OR 1200 BAUD COMMUNICATIONS. THIS SYSTEM APPARENTLY DOES WITH SOFTWARE WHAT COSTS \$400- \$1000 TO DO WITH HARDWARE ON OTHER PERSONAL COMPUTERS. SUPERTERM '64 MID......(T).......99.00.......FALL.NA SIMILAR TO '64 TERMINAL (ABOVE) WITH UP AND DOWN LOADING. ....(NA)......129.00......NDW..NA THIS IS A SERIAL INTERFACE, CABLE, AND SOFTWARE PACKAGE FOR TELECOMPUTING; FEATURES DOWNLOAD AND FILE-CONVERSIONS (ASCII, BASIC, BINARY, & MAE). YOU SUPPLY THE MODEM. CTE ("DUMB" TERMINAL SOFTWARE, SELECTABLE BAUD RATE) MSD..........NA.....NA.....NA....NA SMART TERMINAL BYR.........(D/T)......18.95/16.95.....NA...NA SMOOTH SCROLLING / TRANSMITS ALL ASCII CONTROL CODES / KEY REPEAT / 4 PRE-LOAD LINES / MENU DRIVEN TRANSMITTED AND RECEIVED CHARACTERS IN DIFFERENT COLORS. OMNICOMM ST6........(D/T)......34.95.......NA...NA UP-DOWN LOAD / DUMPS TO PRINTER.

# TELECOMPUTING (CONT'D) > NEW ADDITIONS COMPUSERVE EXECUTIVE FOR THE 64 CSV......(D)......49.95......NOW..\*\*\*\* COMPUSERVE'S VIDTEX PROGRAM IS A FULL-FEATURED SMART TERMINAL PACKAGE. THO OPTIMIZED FOR COMPUSERVE'S OWN INFORMATION SERVICE, TERMINAL PARAMETERS CAN BE EASILY MODIFIED FOR USE WITH A WIDE RANGE OF HOST COMPUTERS. SOME FEATURES: 32K SAVE BUFFER/ DUMP TO PRINTER/ DEFINABLE FUNCTION KEYS/ INTERPRETS COMPUSERVE'S COMMANDS FOR SPECIAL VIDEO TEXT AND GRAPHICS EFFECTS/ AUTO LOGON/ "B" PROTOCOL ERROR-PROTECTED FILE TRANSFER. MOUTHPIECE UP/DOWNLOAD- 30K BUFFER- SUPPORTS VARIOUS PRINTERS-DEFINABLE FUNCTION KEYS- ON-SCREEN HELP & STATUS DISPLAYS- SUPPORTS 110 TO 1200 BAUD MODEMS- MACHINE LANG. INTEL-TERM RTC.....(D).....(50.00......NA...NA SMART TERMINAL SOFTWARE FROM RICHVALE TELECOMMUNICATIONS INCLUDES "COLOR 80" (SEE 'DOUBLE-TAKE' THIS ISSUE), AND EMULATES THE POPULAR VT-100 TERMINAL. COMMANDER ULTRA TERMINAL-64 CRQ.....(R)......69.95.....NA...NA SELECTABLE TERMINAL PARAMETERS/ DOWNLOAD TO DISK/ DUMP TO PRINTER/ ELAPSED-TIME INDICATOR TRANS-TERM DAY.......(D)......29.95......NA...NA 'SMART' TERMINAL PROGRAM/ DOWNLOAD TO DISK DIAL-FILE DAY......(D).....14.95.....NA...NA E, RETRIEVE, AND DIAL 140+ PHONE NUMBERS FROM STORE, SOFTWARE. MAGIC WAND 64 THIS SMART TERMINAL PROGRAM CLAIMS TO ENABLE COMMODORE MODEMS (1600 AND 1650) TO COMMUNICATE AT 1200 BAUD (OR MORE)! UP & DOWNLOADING. MULTI-PURPOSE INTERFACES & NETWORKING C64-LINK DATA TRANSFER BETWEEN ANY DEVICE AND ANY OTHER DEVICE (IE: SERIAL-PARALLES, IEEE-SERIAL, PARALLEL-SERIAL ETC. / BASIC 4.0 COMMANDS / SIMPLE NETWORKING OF SEVERAL 64's / M.L. MONITOR / RESIDENT TERMINAL SOFTWARE / CP/M COMPATIBILITY. BUSCARD VICTREE ADDS BASIC 4.0 COMMANDS: PROVIDES PRINTER INTERFACE FROM USER-PORT. INTERPOD ACCESS UP TO 30 RS232 AND IEEE DEVICES THRU SERIAL PORT OF VIC/64 SWITCH BSS......NA...NA LINKS UP TO 8 64'S WITH SHARED DISK DRIVE AND PRINTER. CEENET NETWORKS UP TO 64 CBM 64'S TOGETHER. ALL MAY SHARE COMMON PERIPHERALS. APPLICATIONS SOFTWARE SUPPORTS INTER-NETWORK MAIL, TEMINAL LINKING, FILE PROTECTION, AND DATABASE SUPPORT. UP TO 255 CEENETS CAN BE

INTERCONNECTED.

### NEW ADDITIONS

MIII TT-I TNK

RTC......ABOUT \$100 PER COMPUTER...Q1...NA
WILL CONNECT UP TO SIXTY-FOUR 64'S IN A LOCAL NETWORK
UNDER CONTROL OF ONE 'MASTER' 64/ ESPECIALLY SUITED FOR
EDUCATIONAL ENVIRONMENT.

OCTOPUS

# A/D-D/A-DATA AQUISITION >

UNIVERSAL LABORATORY INTERFACE

TEMPERATURE MEASUREMENT AND CONTROL

SEQUENCER

VICONTROLLER

AUTO CLOCK

BUSSTER A64

### NEW ADDITIONS

MW-311C UNIVERSAL INPUT-DUTPUT BOARD

MULTI-LAB

# A/D-D/A ETC. (CONT/D) >

HOME AUTOMATIC WEATHER STATION (HAWS) TRENDS AND GRAPHICALLY DISPLAYS TRENDS/ MONITORS: DEEM POINT, TEMP, HUMIDITY, & ATMOS. PRESSURE. MANUAL PLUS METEOROLOGY INSTRUCTIONAL MATERIALS ON DISK & PRINTED. SIMPLE CONNECTION/DISCONNECTION.



# STANDARD INTERFACES

CIE (IEEE 488 INTERFACE)	
MSDNANANA	A
C232 (RS232 INTERFACE)	
MSD	NA.
CX-6402 RS232 INTERFACE	
ECX	NA.
ADA 6410 (RS232 INTERFACE)	
CMC	A
MODEM INTERFACE	
BMT	IA

# VIDEO ENHANCEMENT

VIDEO PAK 80

40 COL. COLOR/ 80 COL. MONOCHROME: INCLUDES TERMINAL AND
SCREEN-PRINT SOFTWARE.
Z-80 VIDEO PAK
DAT
ABOVE FEATURES PLUS CP/M COMPATIBILITY VIA BUILT-IN Z-80
MICROPROCESSOR.
COLOR-80 SOFTWARE.
RTC(DISK)39.95NDW***
80 COLUMNS FROM SOFTWARE, USES NO BASIC RAM /
COMPATIBLE WITH C-64 LINK. (SEE 'DOUBLE-TAKE' THIS
TSSUE)

SCREENMAKER	
C6R	179.95NANA
80 COL. BOARD WITH SOFTWAR	

VID (VIDEO IMPROVEMENT DEVICE)

PLUG THIS LITTLE WIDGET INTO YOUR 5-PIN VIDED PORT AND HOOK YOUR T.V. TO THE USUAL RF PLUG. VISIBLE IMPROVEMENT OF PICTURE QUALITY ON MANY TV'S (SEE FALL ISSUE.)

#### NEW ADDITIONS

PICTURE PERFECT VIDEO ENHANCER		
PIC	11.95	NANA
WAVE 80-COLUMN VIDEO BOARD		
WCI	.139.95	NOWNA

## EXPANSION BOARDS >

CARDBOARD 5	
CAR	***
ATTRACTIVE, FUSE-PROTECTED 5-SLOT EXPANSION BOARD	FOR
THE 64. EACH SLOT HAS 4 LED STATUS INDICATORS AND	TWO
SWITHCHES TO DIRECTLY CONTROL VARIOUS MEMORY AND AC	CESS
FUNCTIONS. TWO MASTER SWITCHES AND INDICATORS A	LLOW
OVERRIDE AT ANY TIME. CAN BE USED TO SIMPLY ELIMI	
CONSTANT INSERTION AND REMOVAL OF CARTRIDGES, OR	HTIN
SWITCHES AND IMAGINATION, SOME MORE INTRIG	JING
APPLICATIONS BECOME POSSIBLE.	
EXPANDOPORT 4	
MSDNANANANANA	A

EXPANDOPORT 4	
MSD	
A DODTO HITTH FUCE AL	

4 PORTS WITH FUSE AND RESET. 4-SLOT EXPANDER

PTI..... 4 SLOTS, 4 TOGGLE SWITCHES, RESET & FUSE. SOFTAWARE BOX

8 SLOTS, EACH SWITCHED, 110 V. OUTLETS, RESET, OPTIONAL

5 V. POWER SUPPLY. BUSMASTER (6-SLOT, SWITCH SELECT, FUSED, LEDS)

BUSMASTER-II .....99.95.....NA...NA

SAME AS ABOVE ONLY W/ SOFTWARE SELECTABLE SLOTS (ALLOWS MEMORY PAGING TO 6X64 K) 7-SLOT EXPANDER BOARD

4-SLOT EPROM CARD

PQ/64

PQ/64 RS 6LO.....NA...NA PERFORMS RS-232 VOLTAGE CONVERSIONS FOR PG/64.

ROM PACKS (FOR ABOVE)

6LO......NA...NA

#### NEW ADDITIONS

DATASPAN (3 SLOTS/ ROTARY SWITCH) SMARTSLOT (THE INTELLIGENT EXPANSION BUS) 6AL.....NA...NA

# OTHER INTERFACES

PROMETHIUS I 6500 VCR. CARDETTE

......NDW..\*\*\* INTERFACE ALLOWS USE OF NON-CBM CASSETTE DECKS. IT SEEMS THAT THE ECONOMY TYPE TAPE DECKS ACTUALLY WORK BETTER WITH THIS THAN THE PREMIUM TYPES.

CBM 64 RABBIT CARTRIDGE

UNINTERRUPTABLE POWER SYSTEM: KEEP COMPUTING FOR TWENTY MINUTES AFTER A TOTAL POWER DUTAGE. GIVES YOU TIME TO

SAVE YOUR FILES, ETC. LEMON / LIME / PEACH / ORANGE EPD......NA...NA...NA LINE OF AC FILTERS AND SURGE PROTECTORS TO PROTECT

COMPUTER EQUIPMENT.

# OTHER INTERFACES (CONT(D) NEW ADDITIONS AP MODULAR PAK (3-PART APPLE EMULATOR SYSTEM) PIO......JAN..NA WE'VE HEARD IT BEFORE, BUT THIS APPEARS TO BE THE REAL THING. CONSISTS OF 3 MODULES: 1) AP BUSS: CONTAINS 8 STANDARD APPLE II PERIPHERAL SLOTS AND 4 C64 EXPANSION SLOTS PLUS A POWER SUPPLY WHICH REPLACES THE 64'S AND HAS ENOUGH MUSCLE FOR ALL EXPANSION SLOTS. 2) AP "CPU" CARD: THE HEART OF THE SYSTEM, PLUGS INTO THE AP BUSS AND HANDLES ALL APPLE II TO C64 CONVERSION. 3) AP DOS CARD: TRANSFORMS THE 1541 DISK DRIVE INTO AN APPLE II COMPATIBLE DRIVE. WITH THE COMPLETE MODULAR PAK YOU MAY RUN ALL APPLE II SOFTWARE ON YOUR 64 AND HAVE IT RUN EXACTLY AS IF IT WERE ON THE APPLE II. YOU MAY ALSO USE ANY PERIPHERALS DESIGNED FOR THE APPLE II (INCLUDING MICROPROCESSORS LIKE THE 6809, 6800, 8088, 8086 ETC.) OR, USE A RANA DISK DRIVE WITH YOUR 64 (AND, IF YOU HAVE AN APPLE, THE DOS CARD ALLOWS YOU TO USE IT WITH A 1541!). LOOK FOR A REVIEW IN THE SPRING (MARCH) ISSUE OF INFO-64. VIAC .........34.95.........NA...NA NON-CBM CASSETTE INTERFACE. 1540 UPGRADE ROM SUPER BLOCKSAVER COB......NA...NA SOFTWARE AND CARTRIDGE ALLOWS MAKING BACKUP COPIES OF C64 CARTRIDGES TO DISK. COB......NA...NA ALLOWS MAKING BACKUPS OF CASSETTE SOFTWARE- USES ONE OR TWO CASSETTE DRIVES. PRINTER INTERFACES > PRODUCT NAME VENDOR CODE MEDIA PRICE AVAIL RTG. CARD/PRINT + 6 (FOR GRAPHICS) ASCII VALUES FOR NON-IMPLEMENTED CHARACTERS) IN A NEWLY DESIGNED PACKAGE. THIS AT THE SAME PRICE THAT MADE THE OLD CARD/PRINT A GREAT VALUE IN PRINTER INTERFACES. (SUITABLE FOR USE WITH: OKIDATA 82,94,92,94, EPSON MX 80, RX 80, FX 80, GEMINI 10X, PROWRITER, CITCH 8510, NEC 8023, AXIOM GP 100, AND BANANA PRINTERS.) CARD/PRINT B .....49.95....

ENHANCED REPLACEMENT FOR THE OLD CARD/PRINT AT A MUCH LOWER PRICE. FEATURES INCLUDE NEW HOUSING WHICH MOUNTS NEATLY TO BACK OF 64 INTEAD OF HANGING OUT AT THE END OF THE CABLE / 3 MICRO-SWITCHES FOR LOCKING THE PRINTER AND

PRINTERS. TRANSLATES CBM ASCII TO STANDARD ASCII. DATA 20 PRINTER INTERFACE (CONNECTS TO MODEM PORT)

DAT......NA...NA

ECX.....NA...NA

MSD......NA...NA

INTERFACE IN VARIOUS CONFIGURATIONS.

CX-6401 SERIAL TO PARALLEL PRINTER INTFC.

CPI (PARALLEL PRINTER INTFC.)

MW-302 PRINTER INTFC.

	-
TYMAC 'CONNECTION' MWD	
INTELLIGENT PARALLEL INTFC. USES DISK/SERIAL PORT /	,
DISPLAYS FULL GRAPHICS SET OR CONVERTS TO TEXT	
EQUIVALENT / PRINTER RESET SWITCH / LED INDICATORS/	'
FACTORY CONFIGURED TO YOUR PRINTER MODEL.  TYMAC PARALLEL CABLE W/ DRIVER	
MWD	
PRINTER SPECIFIC 'ECONOMY' INTERFACE: SOFTWARE AVAILABLE	
ON DISK TO SUPPORT GRAPHICS PRINTING.	
MID	
USES THE MODEM PORT, SO YOU CAN'T CONVEIENTLY USE YOUR PRINTER MODEM AT THE SAME TIME. WE CONSIDER THIS TO BE	1
PRINTER MODEM AT THE SAME TIME. WE CONSIDER THIS TO BE A SERIOUS LIMITATION.	
H SERIOUS EINTIHITUM.	
NEW ADDITIONS	
PRINTMASTER-64	
COB	
CENTRONICS-TYPE PARALLEL INTERFACE FOR EPSON OR GEMINI:	
PRINTS THE FULL COMMODORE GRAPHICS SET/ ADDS 16 COMMANDS TO BASIC/ TEXT & GRAPHIC SCREEN DUMPS/ UN NEW COMMAND.	i
PRINT-64	
COBNANA	
SIMILAR TO PRINTMASTER ABOVE/ PRINTS GRAPHICS CHARACTERS.	ì
SPOOL-Z-Q 32K PRINTER BUFFER (SPOOLER)	
JVBNANA	
A SPOOLER TAKES PRINTER DATA VERY QUICKLY FROM THE	
COMPUTER, HOLDS IT, AND FEEDS IT TO THE PRINTER AT THE PRINTERS PACE- MEANWHILE, THE COMPUTER IS IMMEDIATELY	
FREE TO CONTINUE WITH OTHER TASKS. LARGER BUFFER SIZES	;
AVAILABLE (TO 128K) AT HIGHER COST.	
MICRO SPOOLER CNSNANANA	
COMPLETE RANGE OF SPOOLERS WITH VARYING FEATURES,	
CAPACITIES, & PRICES.	
ADVANCE 1500 PRINTER PROGRAM (SOFTWARE)	
WED	
CLAIMS TO INCREASE SPEED OF 1515 AND 1525 PRINTERS TO 50	1
CPS. ADDS FULL DESCENDERS.	
L&L PRINTER INTERFACE CARD L&L	
FOR GEMINI 10X PRINTER/ INCLUDES COMMODORE SPECIAL	ġ.
CHARACTER LISTING MODE.	
MASS STORAGE	1
PRODUCT NAME	=
VENDOR CODE PRICE AVAIL RTG.	
OCTUTOR II (78 ER OR OR DUAL)	
PETDISK II (3",5",8",8" DUAL) CGR	
CLAIM 10 X SPEED OF 1541 DRIVES. CHECK COMPATIBILITY	1
WITH COMMERCIAL SOFTWARE BEFORE BUYING.	
MSD DISK DRIVE MSDNANANA	
CLAIMS COMPATIBILITY WITH 1541 DISK SOFTWARE / SOFTWARE-	
RECONFIGURABLE OPERATING SYSTEM / SERIAL & IEEE	
INTERFACES.	
ESF-20/64 STRINGY-FLOPPY EXATRON	
THIS DEVICE PROMISES TO BE AN ECONOMICAL ALTERNATIVE TO	
DISK DRIVES; PRICE AND PERFORMANCE FALLING SOMEWHERE	
BETWEEN DISK AND TAPE. THE MAJOR PROBLEM IN THE PAST HAS BEEN LACK OF SOFTWARE IN THIS FORMAT. NOW IT SEEMS SOME	
SOFTWARE HOUSES ARE FINALLY BEGINNING TO PRODUCE	
"WAFER".PRODUCTS.	

# MASS STORAGE (CONT'D) >

UNITRONICS WAFERDRIVE MODULE

UNI......UNDER 100.00......FALL.NA
THIS IS AN IMPLEMENTATION OF THE EXATRON TECHNOLOGY IN A 64-COMPATIBLE PLUG-IN (USER PORT) WAFER DRIVE. CLAIMS SOME OPERATIONS AS FAST AS 1541. COMES WITH 2 BLANK WAFERS AND ONE GAME (MINER 2049ER) ON WAFER. COMPANY HOPES TO HAVE 30-40 COMMERCIAL PROGRAMS AVAILABLE ON WAFER THIS FALL.

### NEW ADDITIONS

ACCESS-M (MEMORY EXPANSION TO 1 MEGABYTE)

MOS......250.00.....FEB..NA
COMES WITH 64K RAM WHICH MAY BE EXPANDED IN 64K
INCREMENTS UP TO 1 MEGABYTE. PROPRIETARY MEMORYMANAGEMENT TECHNIQUE (NOT BANK SWITCHED)/ COMES WITH DISK- EMULATION SOFTWARE (RAMDISK) AND MEMORY MANAGEMENT SOFTWARE. PLUGS INTO CARTRIDGE SLOT AND PROVIDES 2 FREE EXPANSION SLOTS PLUS 4 RAM BOARD SLOTS (EACH RAM BOARD CAN HOLD 256K (4 64K CHIPS). SOME 3RD PARTY SOFTWARE HOUSES ARE ALREADY WORKING WITH MOSAIC ON NEW SOFTWARE PACKAGES WHICH WILL TAKE ADVANTAGE OF THIS HUGE AMOUNT OF RAM.

### SENSORY PERIPHERALS

TWO MODELS OF SOLID STATE IMAGING DEVICE (THE DIFFERENCE BEING IN THE MAXIMUM DISTANCE DEVICE MAY BE FROM COMPUTER). BOTH CONNECT TO EXPANSION PORT OF 64, SOFTWARE INCLUDED ALLOWS DISPLAY OF IMAGES TO SCREEN. GRAY- SCALE / SOFTWARE CONTROLLED SHUTTER / FRAME STORE & RECALL.

DIGI/CAM

SPEAKEASY (WITH 64 ADAPTER)

COMVOICE

LEVELS OF INFLECTION / PLUGS DIRECTLY INTO EXPANSION

VOTRAX PERSONAL SPEECH SYSTEM

AMPLITUDES / SIMULTANEOUS SPEECH AND EITHER MUSIC OR SOUND EFFECTS / 8-OCTAVE 3-VOICE MUSIC / SERIAL AND PARALLEL INTFCS. INCLUDED / BUILT-IN PROGRAMMABLE CLOCK / EXEPTION TABLES / PROGRAMMABLE RATE AND INFLECTION / 3500 CHAR. BUFFER / REAL TIME CLOCK WITH 8 USER-DEFINED ALARMS / BAUDS FROM 75 TO 9600 / MORE!

### NEW ADDITIONS

S.A.M. (SOFTWARE ACTIVATED MOUTH)

DON.....(D).....59.95.....NOW..NA
SOFTWARE SPEECH SYNTHESIZER: NATURAL SOUNDING SPEECH/
VARIABLE PITCH, SPEED, INFLECTION/ ENGLISH
TEXT-TO-SPEECH CONVERSION/ EASY TO USE IN PROGRAMS.

### MODEMS

PRODUCT NAME VENDOR CODE

PRICE

INCLUDED FOR 64.

VICHODEM

Commodore Bus. Machines.....49.95......NDW..\*\*\* MIGHTY MODEM 

300 BAUD MODEM W/ TERMINAL SOFTWARE
BAZ......89.00.....NA...NA

HERMES I (300/ 600/ 1200/ & 2400 BAUD)

THIS MODEM WILL HAVE SPECIAL CAPABILITIES INTENDED TO MAKE IT FUNCTION WITH SATELITE-BASED COMMUNICATIONS NETWORKS.

CARTRIDGE CONVERTS SHORTWAVE RADIO MORSE CODE OUTPUT TO PRINTED TEXT ON SCREEN / INCLUDES ON-SCREEN TUNING

### NEW ADDITIONS

1650 AUTO-DIAL / AUTO-ANSWER

CBM......NDW..\*\*\* 300 BAUD/ INCLUDES AUTO-DIAL, AUTO-ANSWER SOFTWARE AND TERMINAL SOFTWARE (TERMINAL SOFTWARE ALLOWS SETTING TERMINAL PARAMETERS, BUT HAS NO SAVE BUFFER OR UP/DOWN-LOADING )

AM FM LOADER

VIDEO GAME IN ABOUT 4 SECONDS. (THIS OPENS UP A WHOLE NEW MARKET FOR CABLE TV.)

AUTO-PRINT MICROCONNECTION

YOUR SCREEN. INCLUDES TERMINAL SOFTWARE.

### USER INPUT DEVICES

KOALA PAD (WITH SOFTWARE)

MIRROR MODE, COLOR SWAPS, & MANY OTHER DAZZLING EFFECTS! THIS IS ONE OF THE 10 BEST PRODUCTS OF 1983!



CO MANAGEMENT OF THE REAL PROPERTY.	
	REG
INPUT DEVICES (CONT'D) CIRCES (GRAPHICS TABLET)	
VID	
FEATURES CLAIMED: .005" DISCRIMINATION/ PRODUCES SMOULINES / USES 200 COLORS X 200 TEXTURES ON A 1701 MONI	HTC
/ INTERNAL MEMORY, AND INTERACTIVE COMMUNICATION	INS
MODULE. DATAWAFER	
DICNANA	
UNIQUE PACKAGE IS SAID TO REPLACE JOYSTICKS, LIGHT PE	IS,
TRACKBALLS, AND CONVENTIONAL 'MICE'. WIRELESS MOI WORKS ON SÉNSITIVE TABLET (UP TO 20" X 20" AVAILABLE)	JSE
JOY*SENSOR	
SUN	FIS
ACCOMPLISH BOTH MOVEMENT AND 'FIRE- BUTTON' TAS	KS.
ACCOMMODATES RIGHT OR LEFT HANDED PLAYERS. KRAFT JOYSTICK	
KSC14.95NANA	Sec.
QUICKSHOT JOYSTICK (SUCTION-CUP BASE / DUAL FIRE BUTTONS SVI	++
ENJOYSTICK (RIGHT OR LEFT- HAND JOYSTICK)	
TGPNANA ZIRCON TRACKBALL	
ZIR	
CARDKEY/1	
16 KEYS / CAN BE PLUGGED INTO JOYSTICK PORT	OR
PIGGY-BACKED WITH KEYBOARD CONNECTOR ELIMINATING NEED FOR DRIVER SOFTWARE, AND AVOIDING SOFTW	THE
COMPATIBILITY PROBLEMS.	
7 8 9 x cordice	4
7, 8, 9	0
4 5 6	
1 2 3	
- 0 -	
-	
FLEXIKEY SYSTEM	
GSS	3
VALUES/ DRIVER SOFTWARE IN BASIC	
10-KEY PAD GUA	
NUMERIC KEYPAD	
COP	
HES	
PROGRAMMER'S INSTITUTE29.95NOWNA	
THIS PEN IS COMPATIBLE WITH P.I.'S CHILDREN	l'S
EDUCATIONAL SOFTWARE. TOUCH-N-LIGHT PEN	
SUNSHINE PERIPHERALS59.95NOWNA	
CONNECTS TO USER PORT.	
NEW ADDITIONS	
FLEXIDRAW LIGHT PEN (WITH 'PENWARE ' DRAWING SOFTWARE)	
INK	**
RESOLUTION). THIS IS NOT A TOY (ALTHOUGH IT IS LOTS	0F
FUN & THE SOFTWARE IS EXTREMELY EASY TO USE). INCLUD	FS
SOPHISTICATED MACHINE LANG. DRAFTING SOFTWARE/ SEPARATE BASIC ROUTINE FOR PROGRAMMABLE GRAPHICS/ SPRI	TE
EDITOR AND ANIMATOR/ READY-TO-USE TEMPLATES F	OR
ELECTRONIC CIRCUITS, GREEK SYMBOLS, & MUSIC COMPOSITIO LIGHT PEN MUSIC SYNTHESIZER/ AND A LIBRARY OF SAMP	N, LE
DRAWINGS.	

POWERPAD
CBI
WITH ASSORTED APPLICATIONS CARTRIDGES COVERING A WIDE RANGE OF ART, MUSIC, AND EDUCATIONAL PROGRAMS. THE PAD
HAS A UNIQUE SENSING ARANGEMENT THAT RECOGNIZES SIMULTANEOUS ACTIVATION OF MULTIPLE POINTS ON THE ACTIVE
SURFACE. HI-RES LIGHT PEN
SYM
CABLES GADGETS MISCEL ANY
SOUND BOX
HES
VIDEO CABLE (5-PIN TYPE)
DAT12.95NOWNA AUDIO/VIDEO CABLE (5-PIN TYPE)
QUA9.95NANA MONITOR CABLE (5-PIN/ CHROMA, LUMA, AUDIO, AUDIO RETURN) MSD29.95NOW****
UNIVERSAL TAPE INTERFACE & DUPLICATOR
FREEDOM (5' REMOTE KEYBOARD KIT)
POWERMASTER (RUN YOUR 64 OFF YOUR CIGARETTE LIGHTER)
SOFTWARE PROTECTION DEVICES
SOF
ZAX
NEW ADDITIONS
VAAB
INC
Hallical Formula and a company of the company
CS1632 STORAGE CABINET
HYT
LOCKING CABINET WITH ROOM FOR YOUR KEYBOARD AND DISK- DRIVE. DESKTOPPER
MAD
GOES ON TOP. CT130 COMPUTER DESK BUS
CTA131 HUTCH (GOES ON TOP OF CT130)  BUS
CT120 ROLL-ABOUT TABLE BUS
THIS WILL HOLD EITHER A 64 AND DISK DRIVE (MONITOR RAISED OVER KEYBOARD) OR A VERY LARGE PRINTER.

C SHOOT CONTRACTOR OF THE STREET, AND	
FURNITURE P. BACTOSURES	CARDPRINTER/DM1
CTA132 MONITOR/PRINTER PLATFORM	CAR DOT MATRIX IMPAC
BUS	MACHINE (NOT 1 BUILT-IN 64 INTE
CPI	INCLUDING REVERS
AND DISK DRIVES ABOVE KEYBOARD WITH EXTRA CUBBY-HOLES FOR OTHER GOODIES. OAK VENEER.	UTILITY SOFTWARE TRANSTAR 315 COLOR
PRINTER STAND (OAK VENEER / MATCHES ORGANIZER)	TRA 30 SHADES OF COL
CPI	CPS)) PASS. MANNESMANN TALLY M
CPI	MAN
PCT39.95NANA	A FAST, HIGH CORRESPONDENCE-
SDUND TRAP TRC	VP42 THERMAL PRINTE
WELL-DESIGNED AND ATTRACTIVE SOUND REDUCTION ENCLOSURE FOR WIDE RANGE OF PRINTERS. FITS EPSON & GEMINI. SOUND	IMP
ATTENUATION IS GOOD. CAN BE POSITIONED TO DO DOUBLE	30 CPS / 64 INTE
TRAVELMASTER	ENTIRE CBM GRAPP PRINTELEX
SOC	CPE COMPACT 40-COLUM
ONE 64 AND DRIVE. CM703 CASE (HOLDS 64 AND DISK DRIVE)	PARALLEL BUILT-1 EPSON FX-80
DISKBANK 129.00NANA	EPS
AMA	160 CPS/ WIDELY- FONTS AND PITCH
NEW ADDITIONS	SHEET AND PIN-FE
	N
ROLLTOP 100 MCA36.00NOW****	RITEMAN INR
WE HAVE TRIED THEM ALL, AND THIS IS THE MOST CONVENIENT AND SPACE-EFFICIENT LARGE-CAPACITY DISK STORAGE SYSTEM	EPSON WORK-ALIKE
WE HAVE SEEN. HOLDS 100 DISKETTES BETWEEN 11 DIVIDERS. LOCKING SECURITY VERSION ALSO AVAILABLE (\$46.00).	IMPACT "40" THERMAL FID
MAG-RAK R&L	DIRECT-CONNECT T LINE/ USES STAND
HANDY-LOOKING GADGET FOR HOLDING MAGAZINES ₺ BOOKS NEAR	SPEED.
YOUR WORK-STATION.	DALS A VIII
	TRANSTAR 130 TRA
The state of the s	16 CPS / BI-DIR WORDPRO-3 FEATUR
	TRANSTAR 120
	14 CPS / DIABLO
	COMPLETELY SUPPO CARDPRINTER/L01
THE ORGANIZER	CAR 14 CPS DAISY WHE
BRG	WELL AS STANDARD SHADOW PRINT /
SOLID OAK FURNITURE	SOFTWARE SUPPLIE
FINVARIESNOWNA VERY HANDSDME- SEND OR CALL FOR THEIR BROCHURE.	LETTER HEADS AND
DOT MATRIX PRINTERS >	TTX-1014 TTX
GEMINI 10-X SMI399.00NON****	COMPACT DAISYWH INTERFACES BUILT
120 CPS / DOWNLOADABLE CHARACTER SETS / FRICTION, TRACTOR, & ROLL FEEDS / USER- REPLACEABLE PRINT-HEAD /	
STANDARD RIBBONS / WIDE VARIETY OF FONTS & CHAR. SIZES /	
EPSON FX-80 CODE COMPATIBLE. GEMINI DELTA 10	
SMI	
6EMINI STX-80	
THERMAL / 80-COLUMN / GRAPHICS CAPABLE.	

BUILT-IN 64 INTERFACE / FULL CBM GRAPHICS CHARACTER SE INCLUDING REVERSED / HI-RES GRAPHICS / EXPANDED PRINT	1
TRANSTAR 315 COLOR TRA	
30 SHADES OF COLOR IN A SINGLE (IF SOMEWHAT SLOW (5 CPS)) PASS.  MANNESMANN TALLY MT 160	10
MAN	ŧ
A FAST, HIGH-QUALITY PRINTER WITH VERY GOO CORRESPONDENCE- GRADE PRINT & GRAPHICS. VP42 THERMAL PRINTER	
ALP	•
ICD	S
CPE	
PARALLEL BUILT-IN / DOT GRAPHICS.  EPSON FX-80	
EPS	IS
FONTS AND PITCHES/ DOT-GRAPHICS/ DOWNLOADABLE FONTS SHEET AND PIN-FED PAPER HANDLING.	i/ 
NEW ADDITIONS	
RITEMAN	-
INRNANA EPSON WORK-ALIKE, LOOK-ALIKE WITH 120 CPS. IMPACT "40" THERMAL PRINTER	
FID	
DATSYMHEEL PRINTERS	2
TRANSTAR 130	
TRA	1
TRANANOWNA 14 CPS / DIABLO CODE COMPATIBLE / WORDPRO-3 FEATURE	c
COMPLETELY SUPPORTED / FRICTION FEED	.0
COMPLETELY SUPPORTED / FRICTION FEED CARDPRINTER/LG1	
COMPLETELY SUPPORTED / FRICTION FEED  CARDPRINTER/LG1  CAR	S
COMPLETELY SUPPORTED / FRICTION FEED  CARDPRINTER/LO1  CAR	S &
COMPLETELY SUPPORTED / FRICTION FEED  CARDPRINTER/LO1  CAR	S &

## THE PLANT



1702 COLOR MONITOR	
CBM299.00	NOW***
THIS IS ONE OF THE NICEST THINGS COMMODORE	HAS DONE
SINCE INTRODUCING THE 64. MAKE SURE YOU TAKE	ADVANTAGE
OF THE HI-PERFORMANCE BACK-PANEL INPUTS. ONE	
TEN PRODUCTS OF THE YEAR.	
PANASONIC CT-160 (10" COLOR MONITOR)	
PAN	NOM ++++
AMDEK COLOR-1 (12" COLOR MONITOR)	
AMD	NUM +++
PANASONIC CT-1112 (10" COLOR MONITOR/ T.V.)	· NUM · · AAA
PAN	NUM TITE
	. NUW XXXT
AMDEK VIDEO 300 (12" 80-COL. GREEN MONITOR)	NON LLL
AMD199.00	. NUM XXXT
AMDEK VIDEO 300A (12" 80-COL. AMBER MONITOR)	NOU
AMD215.00	.NUW ***
GORILLA MONITOR ( 12" 80-COL. GREEN SCREEN)	
LEP99.00	.NANA
TRANSTAR 20 (12" 80-COL. GREEN SCREEN)	
TRA170.00	.NANA

COMPUSE			KIND CHANGE	
	CSV	30.00	6.00	***
SOURCE	200	100.00	7 75	
		100.00	/./3	***
DELLHI	INFORMATION			
	DEL	49.95	5.00	NA

COMPUTE! (COVERS MANY MICROS, 64 GETS PRETTY GOOD COVERAGE CPU
COMPUTE!'S GAZETTE (VIC & 64 MAG)
CPU
COMMANDER (COMMODORE ONLY)
MSS2.9512****
OPTIMIZER 64
PAL2.5012***
CANADIAN 64-ONLY PUBLICATION. USEFUL INFORMATION
LISTINGS, & ARTICLES. INTERESTING FORMAT IDEA: EAC
ISSUE COMES IN A PLASTIC COVER WITH ONE OF THOSE PLASTI
RIB-CLAMPS WHICH MAY BE REMOVED SO THE ISSUES MAY B
KEPT IN ONE LARGE 3-RING BINDER.
TRANSACTOR (COMMODORE ONLY)

BOOKS & I	disc.	REFER	ane	
PROGRAMMER'S REFERE	NCE GUIDE			

PROGRAMMER'S REFERENCE GUIDE	10.05	
	19.95	***
THE ELEMENTARY 64		
DMO	14.95	***
THE MASTER MEMORY MAP		
EDU	NAN	Α
GUIDE TO 64'S MEMORY, AND HOW AND POKES.	W TO CONTROL IT WITH P	EEKS

INSIDE THE COMMODORE 64	FDFF / L
(*) FREE WITH PURCHASE OF D MACHINE LANGUAGE, ASS ARCHITECTURE / SAMPLE PROGR HOW TO MAKE MONEY WITH YOUR CB	4 64
PRAPRINTER PROGRAMMING MANUALS	4.95NA
REH	15.00NA OUT OF YOUR EPSON PRINTER
AND 64. (WOULD PROBABLY APP DUMPS / SIDEWAYS PRINTING,	LY TO GEMINI TOO)/ SCREEN
PAL PMP	9.95
YOU REALLY GET YOUR MONEY? PRINTED AIDS. KEYBOARD TEM / LOG SHEETS / BASE CONVERS SOUND AND BASIC LANGUAGE RE	S WORTH WITH THIS PAD OF PLATES / SCREEN LAYOUT FRIDS ION CHARTS / SPRITE FRIDS / FERENCES.
KEYBOARD OVERLAY (PLASTIC WITH	BASIC REFERENCES.)
PC-DOCUMATE (BASIC REFERENCE OF	/ERLAY)
THE PROMPTER (PLASTIC FUNCTION	12.95NA KEY OVERLAYS)3.95 (PKG OF 4)***
	39130 506.34.389
NEW ADD	ITIONS
YOUR COMMODORE 64	10.05
I SPEAK BASIC TO MY COMMODORE &	
THE ELEMENTARY COMMODORE 64	.NANDW***
DMO ======= TOTALLY MISCELLANEOUS	14.95NOW***
PRODUCT NAME	
VENDOR CODE	PRICE AVAIL RTG.
DATA LOSS INSURANCE	NANANA
DISK DOUBLER	9.95NANA
CUTS A JUST-RIGHT NOTCH IN Y	OUR DOUBLE SIDED DISKETTES
SOFTWARE TRADING GROUP TSE YOU SEND IN A TAPE WITH A PR	9.95NANA
THE COMMODORE 64 MUSIC BOOK	IR TAPE AND RETURN IT TO YOU.
BDB	4.95NOWNA CT OF MAKING MUSIC WITH
CONTROL OF STATES	





# NEO 6

# 

CODE	COMPANY  36 COMPANY INC. AARDVARK ABACUS SOFTWARE A B COMPUTERS ACABEMY SOFTWARE A CCESS SOFTWARE A-1 COMPUTER SERVICES ASSOCIATION OF COMPUTER USERS ADVANCED ARCADEWARE ADVENTURES INC. ADVENTURE INTERNATIONAL AVALON HILL GAME CO. ARTIFICIAL INTELLIGENCE RESEARCH GROUP ALIEN GROUP ALPHACOM AMBAC CORPORATION AMBEK CORP. AMERICAN DATA CABLE INC. AMIGA CORPORATION ANIMAX COMPUTER ARBUTUS TOTAL SOFT INC. ARTES MARKETING CO. ARKTRONICS ARTWORX SOFTWARE CO. INC. ATARISOFT AVACOR BYTES & BITS BYTES & PIECES BASIC BYTE INC. BANED SOFTWARE BYTES INCLUBED BAI ELECTRONICS B. DALTON BOOKSELLER BEHAVIORAL ENGINEERING BOSTON ELECTRONIC SYSTEMS TRAINING INFO-64 INFO-64 INFO-64 INFO-64 BIBLE SOFTWARE BICARDS BIZWARE INC. BULUE CHIP SOFTWARE BICARDS BIZWARE INC. BYTESIZE MICRO TECHNOLOGY BOSTON EUCCTIONAL COMPUTING INC. ROBERT J. BRADY CO. B.R. GREEN BRILLEY SOFTWARE BUBBLE BUS BYTE-RYTE BY	CITY	STATE	PHONE #
360-	36 COMPANY INC.	GASTON	OR	(503)357-9889
ARA-	ARACHS SOFTWARE	FRAND RAPIDS	MT	616-241-5510
ABC-	A B COMPUTERS	COLMAR	PA	215-822-7727
ACA-	ACADEMY SOFTWARE	SAN RAFAEL	CA	414-499-0850
ACC-	ALLESS SUFIMARE A=1 COMPUTER SERVICES	SALI LAKE CITY	UI WA	509-783-4980
ACU	ASSOCIATION OF COMPUTER USERS	BOULDER	CO	307 703 4700
ADA-	ADVANCED ARCADEWARE	THOMASVILLE	NC	919-431-3231
ADI_	ADVENTURES INC.	ALEXANDRIA	VA	305-842-4917
AHG-	AVALON HILL GAME CO.	BALTIMORE	MD	301-254-5300
AIR-	ARTIFICIAL INTELLIGENCE RESEARCH GROUP	LOS ANGELES	CA	213 656 7368
ALI-	ALIEN GROUP	NEW YORK	NY CA	
AMA-	AMARAY CORPORATION	LAMPBELL LOS ALTOS	CA	415 968 2840
AMD-	AMDEK CORP.	ELK GROVE VILLAGE	ĬĹ	312-364-1180
AME-	AMERICAN DATA CABLE INC.	PLACERVILLE	CA	916-622-3465
AMI-	ANIMAY COMPUTED	SANIA CLAKA	LA	702 394 0744
ARB-	ARBUTUS TOTAL SOFT INC.	BELLINGHAM	WA	206-733-0404
ARI-	ARIES MARKETING CO.	BALTIMORE	MD	
ARK	ARKTRONICS	ANN ARBOR	MI	800 CALL ARK
AK!-	ATARISHET	SU SON EBONCISCO	NΥ	408 745 2000
AVC-	AVCOR	TORONTO	ON CANADA	416 864 9240
B&B	BYTES & BITS	PHOENIX	AZ	602 942 1475
B&P-	BYTES & PIECES	WAUWATOSA	WI	414 257 3562
BAN BAN	BANED SOFTWARE	WEST KEANSBURG	NY	000-033-2240
BAT-	BATTERIES INCLUDED	TORONTO	DN CANADA	416-596-1405
BAZ-	BAZ ELECTRONICS	FEDERAL WAY	WA	206 874 3029
BDR-	B. DALIUN BUUKSELLEK	MINNEAPULIS	nn CA	408 478 5449
BES-	BOSTON ELECTRONIC SYSTEMS TRAINING	NEWTONVILLE	MA	100 100 3017
BFD-	INFO-64	AUBURN	WA	206 939 0582
BFD-	INFO-64	AUBURN	WA	
BIR-	RITCARDS	PI ANTATION	FL	305 473 4741
BIZ-	BIZWARE INC.	LILBURN	6A	800 221 7171
BLU	BLUE CHIP SOFTWARE	TARZANA	CA	001 071 DUTE
BMT-	BYTESIZE MICRO TECHNOLOGY	SEATTLE	WA MA	206 236 BYIE
BRA-	ROBERT J. BRADY CO.	BOWIE	MD	301 262 6300
BRG	B.R. GREEN	LOS ANGELES	CA	800 824 7888
BRI-	BRILEY SOFTWARE	LIVERMORE	CA	
BKO-	BLUE CAN CUELMUSE	VOORHEES	N.T	609-795-4025
BUB	BUBBLE BUS	TONBRIDGE/KENT	ENG	
BYR	BYTE-RYTE	MONTREAL	PB CANADA	040 070 4440
BYT-	BYTEMARK COMPUTED ACCESSORIES	BAKEBSETELD	IN	219 232 4002 805 872 4488
CAI-	COMPUTER ADVANCED IDEAS	BERKELEY	CA	415 526 9100
CAN	COMPUTER ANTICS INC.	YORKTOWN HEIGHTS	NY	
CAR-	CARDCO INC.	WICHITA	KS	316-267-6525
CRI-	CHAILE SUFTWARE	ATI ANTA	6A	800 241 3989
CBM-	COMMODORE BUSINESS MACHINES	WEST CHESTER	PA	215 431 9100
CBS-	CBS SOFTWARE	GREENWICH	CT	203 622 2503
CBA-	COMPLIED CACE COMPANY	CULTINETIS	CH NH	614 868 9464
CCI-	CLOCKWORK COMPUTERS	ROCKVILLE	MD	301 924 4157
CDC-	COMM*DATA COMPUTER HOUSE	MILFORD	MI DAMADA	313-685-0113
CDS-	COMMERCIAL DATA SYSTEMS LTD.	REGINA	SK CANADA	306 323 3386 215-757-0284
CIM-	CIMARRON CORP.	SANTA ANA	CA	714-662-2801
CIR-	CIRCADIAN SOFTWARE INC.	MELBOURNE	FL	305 723 5717
CIS-	CITY SOFTWARE	PDODUCTE! D	CT	414-277-1230 (C)
CMC-	CONNECTICUT MICROCUMPUTER	TUBBONCE RKUUKL IELD	CA	213 373 0280
CNC-	CONSOLINK CORP.	LONGMONT	CO	800 525 6705
COA-	COMPUTER ALLIANCE	CHATSWWORTH	CA	213-368-4089
COB	COMPUTED BUSINESS SYSTEMS	PORTLAND	OR CA	914 344 3409
COC-	CUMPUTER CENTER	SHURHIERIU	LR	710 300 3007

CODE COMPOUTERMAT  COM- COMPUTERMAT  COM- COMPUTER PLACE  COM- CONTINENTAL SOFTWARE CO.  COM- COMPUTER PLACE  COM- COMPUTER PERIPHERALS  COM- COMPUTER PERIPHERALS  COM- COMPUTER PERIPHERALS  COM- COMPUTER PERIPHERALS  COM- COMPUTER POWER INT'L  CRE- CREATIVE SUPTAMER  CRE- CREATIVE SUPTAMER  CRE- CREATIVE SUPTAMER  COM- COMPUTER  COMPUTER SUPTAMER  COM- COMPUTER  COMPUT	PHONE #
COM- COMPUTERMAT LAKE HAVASU CITY AZ	602-855-3357
COP- COMPUTER PLACE TORRANCE CA	213-325-4754
COU COUNTERPOINT SOFTWARE INC. MINNEAPOLIS MN CPE- COMPUTER PERIPHERALS LOS ANGELES CA	213 298 1297
CPI- COMPUTER POWER INT'L HEMET CA	800-258-7862
CRE- CREATIVE SOFTWARE SUNNYVALE CA	408-745-1655
CRO- CROSSTECH GRAPHICS CHICAGO IL	312-871-3555 305-261-7866
CSA- COMPUTER SOFTWARE ASSOCIATES RANDOLPH MA	800-343-1078
CSS COMPREHENSIVE SOFTWARE SUPPORT REDONDO BEACH CA	213 318 2561
CSV- COMPUSERVE COLUMBUS OH	800-848-8199
CUE- CUESTA SYSTEMS INC. SAN LUIS OBISPO CA	805 541 4160
CUG- COMMODURE 64 USERS GROUP LISEE IL CUR- CURSOR 64 SANTA BARBARA CA	312 369 6525 805-683-1585
CYB- CYBERIA INC. AMES IA	800 247 3900
DAB- DAYBREAK SOFTWARE BALDWIN NY	800 645 3739
DAS DATASOFT INC. CHATSWORTH CA	213 701 5161 714 770 2366
DAY - DAVIDSON & ASSOCIATES RANCHO PALOS VERDES CA	213 378 7826
DEE DOUBLE E ELECTRONICS INC. DAYTON NE	402 334 7870
DEL- GENERAL VIDEOTEX CORP. CAMBRIDGE MA	617-491-3393
DIA- DIALOGUE INFORMATION SERVICES PALO ALTO CA	800 528 6050/415
DIC- DISPLAY INTERFACE CORP. MILFORD CI DIG- DIGITAL ARTS CORP. CINCINNATI OH	203 8// /661 513-891-1217
DIL- DILITHIUM SOFTWARE BEAVERTON OR	800 547 1842
DLM- DEVELOPMENTAL LEARNING MATERIALS ALLEN TX	800 527 4747
DLX- DELUXE COMPUTER FORMS ST. PAUL MN DMI- DMI SOFTWARE INC. SAN DIFFO CA	800 228 5666 619-223-4496
DMO- DATAMOST INC. CHATSWORTH CA	213-709-1202
DON- DON'T ASK COMPUTER SOFTWARE LOS ANGELES CA	213-477-4514
DOW- DOW JONES NEWS PRINCETON NJ DTB DATABAR CORPORATION FDEN PRAIRIE MN	800 222 0081 612 944 5700
DTK- DATA TREK ENCINITAS CA	619 436 5055
DYM DYMARC INDUSTRIES INC. BALTIMORE MD	800 638 9098
DYN- DYNACOMP INC. ROCHESTER NY DYT DYNATECH MICROSOFTWARE INC. NILES II	716 442 8960 800 621 4109
EAS- EASTERN HOUSE WINSTON-SALEM NC	919-924-2889
ECI - EDUCATION CIRCUIT INC. LANDING NJ	201-398-6185
ECP- EMBASSY COMPUTER PRODUCTS LITTLE NECK NY FCY- FCY COMPUTER COMPANY WALNUT CREEK CA	415-944-9277
EDU- EDUCATIONAL SOFTWARE INC SOQUEL CA	800 692 9520
ELC- ELECTRA CONCEPTS NEW YORK NY	212-535-0697
ELE- ELECTRONIC ARTS SAN MATEO CA	415 571 7171
EME- EMERALD SOFTWARE LINDENHURST NY	516-226-5849
ENG- ENGLISH SUFTWARE REDUNDU BEACH CA ENT- EN-TECH SOFTWARE SUN VALLEY CA	213 372 3440 213-764-6833
EPD- ELECTRONIC PROTECTION DEVICES INC. WALTHAM MA	617-891-6602
EPS- EPSON AMERICA INC. TORRANCE CA	213-539-9140
EPY- EPYX/ AUTUMATED SIMULATIONS INC. SUNNYVALE CA ESI- ELECTRONIC SOFTWARE INC. BLOOMFIELD HILLS MT	
EST ESTES ENGINEERING INC. SALINA KS	913 827 0629
F/2 F/22 PRESS LEONIA NJ	201 568 6250
FAB- FABTRONICS BROCKPORT NY FAN- FANTASY COMUTERWARE STORY FALLS SD	405-775-7484
FER- FERIN ENTERPRISES CEDAR RAPIDS IA	TAR DOD 4655
FIN- FINETECH FURNITURE INC. MODDBURY TN	505 888 1000 615 765 5021
FIR FIRST STAR SOFTWARE INC NEW YORK NY FOU- FOLYVILLE COMMUNICATIONS CORP SCOTTERALE	212 532 4666 402 848 8817
FOX- FOXSOFT (DIVISION OF FOXFIRE SYSTEMS) DEER PARK TX	713-473-6723
TRE- FRENCH SILK SHOUTHWAKE CANNON FALLS AN	507-263-4821

CODE	COMPANY  FRONTLINE PRODUCTS FUNSOFT  GALACTIC SOFTWARE GAMESTAR INC. GENESIS COMPUTER CORP. GEMTECH LABORATORIES GLOUCESTER COMPUTER GAMMA RESEARCH GENTY SOFTWARE GOSUB INTERNATIONAL INC. GP MICROSYSTEMS GRAPEVINE SOFTWARE INC. GOSUB OF SLIDELL GENEVA TECHNOLOGIES CORP. GATOR SOFTWARE HAY BENTERPRISES HACKER'S HARDWARE HAYDEN BOOK COMPANY INC. HAYDEN SOFTWARE HAYDEN SOFTWARE HAYDEN SOFTWARE HAYDEN SOFTWARE HORIZON SOFTWARE HORIZON SOFTWARE HOT DATA HIGH TECH ENTERPRISES HUTCHCRAFT ASSOCIATES HYTEC SYSTEMS INFO-DESIGNS INTEGRATED CONTROLS INFOCOM INC. INFINITY SOFTWARE INFOLOSIGNS INFOCOM INC. INFORUNNER CORPORATION INTELLIGENT STATEMENTS INFUT SYSTEMS INC. INFORUNNER CORPORATION INTELLIGENT STATEMENTS INSTITUTIONAL COMPUTER DVLPMNT. CORP. INTERESTING SOFTWARE IPF PUBLICATIONS JSIS HATHOR DIGITAL PRODUCTIONS JANCE ASSOCIATES INC. JASON-RANHEIM JINI MICRO-SYSTEMS JOU LABORTORIES JOUS ABORTORIES JOUS ANOTHER SOFTWARE CO. JVB ELECTRONICS KATTWINKE KOMPUTING KIDMARE KOALA TECHNOLOGIES CORP. KOALA TECHNOLOGIES C	CITY	STATE	PHONE #
FRO-	FRONTLINE PRODUCTS	GLENDALE	CA	213 845 8139
GAL-	GALACTIC SOFTWARE	SAN JOSE	CA	408-247-4434
SAM	GAMESTAR INC.	SANTA BARBARA	CA	805 963 3487
ECC-	GENESIS COMPUTER CORP.	BETHLEHEM	PA	215-861-0850
6LO	6LOUCESTER COMPUTER	GLOUCESTER	NC MA	
6MA-	GAMMA RESEARCH	LOS ANGELES	CA	213 463 2345
60S-	GOSUB INTERNATIONAL INC.	WICHITA	KA	316 265 9992
GRA-	GRAPEVINE SOFTWARE INC.	GLENDALE LENEXA	NY KS	913 888 0501
6SS-	GOSUB OF SLIDELL	SLIDELL	LA	504-641-8307
6TR	GATOR SOFTWARE	LAKEWOOD	CA	201 2/0 1144
H&H-	H&H ENTERPRISES HACKER'S HARDWARE	MILWAUKEE SAN DIEGO	CA	
HAS	HAYDEN BOOK COMPANY INC.	ROCHELLE PARK	NJ	800 631 0856
HBJ-	HARCOURT BRACE JOVANOVICH INC.	SAN DIEGO	CA	800 543 1918
HES-	HUMAN ENGINEERED SOFTWARE	BRISBANE	CA	800 227 6703
HOR-	HORIZON SOFTWARE	ASTORIA	NY	001 310 0113
HOT HTF-	HOT DATA HIGH TECH ENTERPRISES	SANTA MONICA NEWPORT BEACH	CA	213 393 6405
HUT-	HUTCHCRAFT ASSOCIATES	ITHACA	NY	607-347-4782
IDC-	HYTEL SYSTEMS	BIRMINGHAM	MI	313-540-4010
INC-	INTEGRATED CONTROLS	COSTA MESA	CA	714 641 0181
INI	INFINITY SOFTWARE	SAN JOSE	CA	408 629 6208
INK	INKWELL SYSTEMS INC.	SAN DIEGO HOMESTEAD	CA FI	619 268 8792 305 245 3141
INR	INFORUNNER CORPORATION	SANTA MONICA	CĀ	800 824 3044
INS	INSTITUTIONAL COMPUTER DVLPMNT. CORP.	BELLMORE	NY	800 534 5470
INT-	INTERESTING SOFTWARE	TORRANCE	CA	213-328-9422 914 354 5585
ISI-	ISIS HATHOR DIGITAL PRODUCTIONS	GOLETA	CA	805-964-6335
JAN JAS-	JANCE ASSUCIATES INC. JASON-RANHEIM	EAST TEXAS SAN JOSE	PA CA	800 421 7731
JIN-	JINI MICRO-SYSTEMS	RIVERDALE	NY	212-796-6200
JUS-	JUST ANOTHER SOFTWARE CO.	PALO ALTO	CA	
JVB-	JVB ELECTRONICS KATTWINKEL KOMPUTING	SACRAMENTO INDIAN HARROUR REACH	CA	916 483 0709
KID	KIDWARE	IDAHO FALLS	ID	000 007 1707
KOL-	KOLOB MARKETING INC.	SALT LAKE CITY	UT	800-227-6703
KRE-	KRELL SOFTWARE CORP.	STONY BROOK	NY	516-751-5139 619-724-7146
L&L	L&L ENGINEERING	KENT	WA	206 631 3383
LAW LEP-	LEADING EDGE PRODUCTS INC.	COPERTINO	CA MA	408 733 0739 800 343-6833
LIM-	LIMBIC SYSTEMS INC.	PALO ALTO	CA	415 964 8788
LIN	LINK HHRKEIING	SCHITLE	WH	)
LIT-	LITTLE WIZARD MANUFACTURING	MILWAUKEE	MI	414 968 2558 619 562 1047
L06-	LOGOS SOFTWARE	SANTA BARBARA	CA	805-687-0205
LUN-	LUNA SOFTWARE	SAN JOSE	CA	408-378-7793
LYN	LYNN COMPUTER SERVICE	TINLEY PARK	IL A7	312 429 1915
MAD-	MADISON COMPUTER	MADISON	WI	608 255 5552
MAG-	MAGREEABLE SOFTWARE INC.	PLYMOUTH	MN WA	612-559-1108 206 251 5500
MAX-	MAXELL CORPORATION OF AMERICA	MOONACHIE	NJ	201-440-8020
MCL-	MICOL SYSTEMS	WHITTIER	CA	213 7// 7210
MCR-	MICROCLEAR MASTER CONTROL SOFTWARE INC	RAYTOWN SALT LAKE CITY	MO	800 624 5596
MD6-	MICRODIGITAL	WEBSTER	NY	800 833 7384
MEG-	LITTLE WIZARD MANUFACTURING LOGISTIC ENGINEERING ASSOCIATES LOGOS SOFTWARE LUNDON SOFTWARE LUNA SOFTWARE LYNN COMPUTER SERVICE MAGIC CARPET MADISON COMPUTER MAGREEABLE SOFTWARE INC. MANNESMANN TALLY MAXELL CORPORATION OF AMERICA MICROCOMPUTER ACCESSORIES MICOL SYSTEMS MICROCLEAR MASTER CONTROL SOFTWARE INC. MICRODIGITAL MICRO-ED INC. MEGA SOFTWARE	KLAMATH FALLS	OR OR	012-720-2272
The second				

CODE	MELCOMP MERRITI SOFTWARE INC. MELCHER SOFTWARE MICRO SOLUTIONS INC. MICRO SOLUTIONS INC. MICRO SOLUTIONS INC. MICROCRAFT SYSTEMS INC. MILTON BRADLEY MINDWORKS MINIONICHT-OIL MICROPERIPHERAL CORP. MILTOLAB INC. MIS MICROLAB INC. MIS MICROLAB INC. MISSING LINK PRODUCTS MMG MICRO SOFTWARE MOSAIC MICROPHYS PROGRAMS MICROPYS PROGRAMS MICROPROSE SOFTWARE MICRO SYSTEMS DEVELOPMENT INC. MICRO SYSTEMS DEVELOPMENT INC. MICRO SIMULATIONS MICROSPEC MICRO SYSTEMS SPECIALTIES MICRO SYSTEMS SPECIALTIES MICRO SYSTEMS SPECIALTIES MICRO STOFTWARE MICRO SYSTEMS SPECIALTIES MICRO STOFTWARE MICRO SYSTEMS SPECIALTIES MICRO SYSTEMS SPECIALTIES MICRO SYSTEMS SPECIALTIES MICRO-WARE DISTRIBUTING INC. MICRO-WARE DISTRIBUTION NATIONAL PROGRAMMING AND SOFTWARE NAVIC SOFTWARE NAVIC SOFTWARE NAVIC SOFTWARE NOTO OFTIMIZED SYSTEMS SOFTWARE INC. OTTO SYSTEMS NEW LEAF INC. NUEKEOP ODESTA CORPORATION O.E.M. INC. OTTO SYSTEMS PACIFIC COAST SOFTWARE CORP. PARSEC RESEARCH PALAMINE LTD. PARSONIC COMPANY PARKER BROTHERS INC. PARSEC RESEARCH PALAMINE LTD. PARSED RESEARCH PARSEC RESEARCH PALAMINE LTD. PARSED RESEARCH PARSED RESEARCH PALAMINE LTD. PARSED RESEARCH PALAMINE LTD. PARSED	CITY	STATE	PHONE #
MEL-	MELCOMP	MELBOURNE	FL	
MEK-	MELCHER SOFTWARE	HATELLEVILLE	AK MT	501 442 0914
MGR-	MICROGRAMS INC.	LOVES PARK	IL	815-965-2464
MID-	MIDWEST MICRO INC.	NEW YURK KANGAS CITY	NY	212-222-6687
MIF-	MICROCRAFT SYSTEMS INC.	ANN ARBOR	MI	313 996 1297
MIL-	MILTON BRADLEY	EAST LONGMEADOW	MA	413 525 6411
MIO-	MIDNIGHT-DIL	BEAVERTON	OR	916 793 2322
MIP-	MICROPERIPHERAL CORP.	REDMOND	WA	206 881 7544
MIN-	MICROTECHNIQUES MIRAGE CONCEPTS INC.	CHESTERFIELD FRESNO	MD CA	209 227 8369
MIS-	MIS	BOULDER CREEK	CA	408-338-9546
MLI-	MICROLAB INC.	HIGHLAND PARK	IL	312 433 7550
MM6	MM6 MICRO SOFTWARE	MARLBORO	NJ	201 431 3472
MOS	MOSAIC	DREGON CITY	OR	800-223-3726
MPH-	MICROPROSE SOFTWARE	BRUUKLYN	MD	212-3/5-5151 301 357 4739
MRS-	MICHAEL RILEY SOFTWARE	PHILADELPHIA	PA	215-923-9663
MSA-	MSA MICEO CYCTEMS REVELOPMENT INC	ATLANTA	6A	000_527_5205
MSM-	MICRO SIMULATIONS	HOUSTON	TX	000-327-3203
MSP-	MICROSPEC	PLANO	TX	214-867-1333
M55-	MICRON TECHNOLOGY INC.	ROISE	WA ID	208-383-4000
MTS-	MICROTECHNIC SOLUTIONS INC.	NEW HAVEN	ĊŤ	203-389-8383
MMD-	MICRO-WARE DISTRIBUTING INC.	BUTLER	NJ	201-838-9027
MWS-	MIDWEST SOFTWARE	FARMINGTON	MI	313-477-0897
MXI-	MAXIMUS INC.	MCLEAN	VA	800 368 2152
MYS-	NIBRIES & RITS INC.	DRCHTT	CA	619-443-9976
NAN	NANOS SYSTEMS CORPORATION	SPEEDWAY	IN	317 244 4078
NAP-	NATIONAL PROGRAMMING AND SOFTWARE	RENTON NORTH PALM BEACH	WA	206 228 1249
NDC-	NDC	INDEPENDENCE	MO	816-254-0400
NEB-	NEBS COMPUTER FORMS	TOWNSEND	MA	800 225 9550
NEW-	NEWPORT CONTROLS	BISHOP	CA	408 358 3430
NLI	NEW LEAF INC.	BELLEVILLE	IL	
ODE-	ODESTA CORPORATION	NORTHBROOK	UK II	800 323 5423
DEM	O.E.M. INC.	FORT PIERCE	FL	
ORT.	ORION SOFTWARE	PASADENA	CA AI	213-795-6664
OSB	OSBORNE/MCGRAW-HILL	BERKELY	CA	800 227 2895
OSS-	OPTIMIZED SYSTEMS SOFTWARE INC.	CUPERTINO	CA	408-446-3099
PAC-	PACIFIC COAST SOFTWARE CORP.	DIAMOND BAR	CA	714-594-8210
PAE	PARSEC RESEARCH	FREMONT	CA	415 651 3160
PAN-	PANASONIC COMPANY	SEACAUCUS	N.J	604-8/9-91/1 201 348 7000
PAR-	PARKER BROTHERS INC.	SALEM	MA	617 927 7600
PAS-	PALACE SOFTWARE	LONDON	M8	LONDON 937 6258
PDI-	PROGRAM DESIGN INC.	GREENWICH	CT	203 661 8799
PEK	PEEK MAGAZINE	CLEVELAND	OH	/17 000 1000
PES-	PERSIMMON PERIPHERALS	CLAYTON	GA	617-828-1209
PGI-	PROGRAMMER'S INSTITUTE	CHAPEL HILL	NC	919-967-0861
PHP-	PRENTICE HALL PUBLISHING	FNGLEWOOD CLIFFS	LA N.I	213 379 8686
PIC-	PICTURE-PERFECT	LOS ANGELES	CA	
PIU-	PIUNEER SUFTWARE INC.	VICTORIA	BC CANADA	604 381 3211
PLA	PLAYGROUND SOFTWARE	CHAPEL HILL	NC	800 334 SOFT
PMI-	PMI PRODUCTS	BUCKFIELD	ME	207 336 2500
PMS-	PROFESSIONAL MICRO SERVICE	BALTIMORE	MD	301-366-0010
POR	POWERLINE SOFTWARE	NEW HARTFORD	NY	/00 74/ 70/7
PPP-	PERSONAL PERIPHERAL PRODUCTS	WEST BEKLIN AURORA	NJ IL	312-961-2347
PRA-	PRACTICAL APPLICATIONS	EDWARDSBUR6	MI	A4 77A 744
- בחוד	LUCTION ONLIMHER FINITED	DUKKET	K14 /JZ	01-330-/166

CODE	PROGRESSIVE PERIPHERALS & SOFTWARE PRINCETON EDUCATIONALG SOFTWARE PROFESSIONAL SOFTWARE INC. PROFESSIONAL SOFTWARE INC. PRS PROGRAMMERS GUILD PSYCOM SOFTWARE INTERNATIONAL PTERODACTYL SOFWARE PRECEISION TECHNOLOGY INC. PACIFIC TRI MICRO PUBLIC DOMAIN INC. PYRAMID SOFTWARE INTERNATIONAL GUICK BROWN FOX GUILTY COMPUTER GUICKSILVA INC. R&L PRODUCTS RAINBOW COMPUTER CORP. RAK ELECTRONICS RAMIBOW COMPUTER CORP. RAK ELECTRONICS RAMIBOW ACCESS MARKETING RAPIDURITER RAYMAC SOFTWARE RICHVALE TELECOMMUNICATIONS RESSON SOFTWARE RICHVALE TELECOMMUNICATIONS SAG CONSULTING SOFT-AWARE SCARBOROUGH SYSTEMS INC. SCHOLASTIC INC. SCIENTIFIC & EDUCATIONAL SOFTWARE INC. SCHOLASTIC INC. SCIENTIFIC & EDUCATIONAL SOFTWARE INC. SCHEEPLAY SYDMEY DATA PRODUCTS INC. SEI ENTERPRISES INC SELECTRIC WORKS SEYAU-KAUN LOKE SOFTSYNC INC. SOFTWARE SIRIUS SOFTWARE INC. SOFTWARE SOFTWARE SIRIUS SOFTWARE INC. SOFTWARE SOUNCE TELECOMPUTING SOURCE TELECOMPUTING SOFTWARE SO	CITY	STATE	PHONE #
PRG-	PROGRESSIVE PERIPHERALS & SOFTWARE PRINCETON EDUCATIONALS SOFTWARE	LAKEWOOD PRINCETON	CO NJ	303 863 7533 201 683 0044
PRL-	PRO-LINE SOFTWARE	MISSISSAUGA	ON CANADA	416 273 6350 617-444-5224
PRS-	PRS	AMARGOSA VALLEY	NV	517-444-3224
PSY-	PSYCOM SOFTWARE INTERNATIONAL	CINCINNATI	OH	513-474-2188
PTE-	PRECEISION TECHNOLOGY INC.	SALT LAKE CITY	CA UT	415-485-0714 801-487-6266
PTM PUB-	PACIFIC TRI MICRO PUBLIC DOMAIN INC.	ORANGE W. MILTON	CA OH	714 771 4038 513 339 1725
PYR ORE-	PYRAMID SOFTWARE INTERNATIONAL	NEM AUBR	CA	415 459 1333 212-925-8290
QUA-	QUALITY COMPUTER	VENTURA CAN ANTONIO	CA	805-656-1330
R&L	R&L PRODUCTS	LOS ANGELES	CÂ	312 472 0034
RAI-	RAINBOW COMPUTER CURP.	DRANGE PARK	FL FL	215-296-3474
RAM-	RAMIAK RANDOM ACCESS MARKETING	AURORA NEWPORT BEACH	CO CA	303-690-3088 714-640-5119
RAP-	RAPIDWRITER	LEVERETT BOILDER CREEK	MA	413-549-3744 408-338-9848
RDC	ROCKWARE DATA CORPORATION	DALLAS	TX	1 800 527 4171
REH-	R. E. HUFFMAN	MUNSTER	IN	
REN RES-	RESTON SOFTWARE SYSTEMS	RESTON	NY VA	800 336 0338
RHI-	RHIANNON RAYMOND L. REYNOLDS	RICHMOND FALL RIVER	VA MA	804 272 7770
ROM-	ROMOX INC.	CAMPBELL	CA	
RSL-	REES SOFTWARE LABORATORIES	CUCAMONGA PICHMOND HILL	CA CANADA	714 981 5925
546-	S&C CONSULTING	BENSALEM	PA	000 707 //47
SAK-	SAURA COMPUTER SOFTWARE & CONSULTING	ANCHORAGE VILLAGE	AK	907-272-1373
SAW- SCA-	SOFT-AWARE SCARBOROUGH SYSTEMS INC.	GLENDORA TARRYTOWN	CA NY	800 882 8222
SCH-	SCHOLASTIC INC.	HICKSVILLE	NY	
SCR-	SCREENPLAY	CHAPEL HILL	NC	800 334-5470
SEI	SEI ENTERPRISES INC	HIGHLAND MILLS	NY	707 005 0007
SEN-	SKYLES ELECTRIC WORKS	MOUNTAIN VIEW	CA	800-227-9998
SEY-	SEYAU-KAUN LOKE SOFTPEOPLE INC.	SANTA ANA SAINT PAUL	CA MN	800 447 3273
SFS-	SOFTSYNC INC.	NEW YORK	NY CA	212 685 2080 800 341 4000
SFT-	SOFTRON INC.	NEW YORK	NY	212 490 0077
SIM-	SIM COMPUTER PRODUCTS INC.	WHITEMARSH	PA	215-825-4250
SIP SIR-	SIRIUS SOFTWARE INC.	SACRAMENTO	CA	916-366-1195
SMA- SMI-	SMALL SYSTEMS ENGINEERING STAR MICRONICS INC.	DALLAS	TX	214-631-8560
SMN-	SIEMENS COMMUNICATION SYSTEMS INC.	ANAHEIM BREVARD	CA NC	714 991 9700 704 883 2595
SMS-	SPELLMASTER SYSTEMS SOFTWARE	GULFPORT	FL	813-347-6733
SNS-	SUNSOFT	ALTURAS	FL CANADA	414-221-9009
SOC-	SOUTHERN CASE INC.	RALEIGH	NC	800 334 0551
SOE SOF-	SOUND EXPANSIONS SOFTLOCK TECHNOLOGY	HOUSE SPRINGS NORWALK	CA	213 868 7820
SOL-	SOLIDUS INTERNATIONAL CORP.	BELLINGHAM RESEDA	WA CA	206-734-3744
SOR-	SOURCE TELECOMPUTING	MCLEAN SOUTH PASADENA	VA CA	800 336 3330
SOU-	SOUTHERN SOLUTIONS	MCKINNEY	TX	214-542-0278 800-251-8066
SOW	SUPERBYTE	WEST BERLIN	NJ	609 346 3063
SPH SPI-	SOPHISTICATED SOFTWARE OF AMERICA SPINNAKER SOFTWARE	CAMBRIDGE	MA	617-868-4700
SSP-	STERLING SWIFT PUBLISHING CO.	AUSTIN MERRICK	NY	516-379-0280

CODE COMPANY  STC- STARTECH INC. STE- STEP INDUSTRIES ST6- SOFTWARE TO 50 ST1 STIMUTECH INC. STP STARPOINT SOFTWARE STR- STRATEGIC SIMULATIONS INC. SUB- SUBLOGIC CORP. SUD- SUNDIAL SOFTWARE ASSOCIATES SUN- SUNCOM INC. SUP SUPERIOR GRAPHICS EMPORIUM SUS- SUSIE SOFTWARE SYI- SPECTRA VIDED INC. SYD- SOFTWARE CONSULTANTS SWP- SOFTWARE PLUS SYD- SYNEV DEVELOPMENT CORP SYF- SYSTEM VII FURNITURE SYM- SYNTEC SYN- SYNTEC SYN- SYNTEC SYN- SYNTEC SYN- SYSTEM MANAGEMENT ASSOCIATES TAF- TAF SOFTWARE COMPANY TAM TAM PRODUCTS TAM- TAMRARCK SOFTWARE TAU- TAVICAMADE SOFTWARE TAU- TAVICAMADE SOFTWARE TAU- TAVICAMADE SOFTWARE TEX- TEXAS TECHNICAL SERVICES INC. TAY- TAYLORMADE SOFTWARE TEX- TELEGAMES NOT. THO THOR SOFTWARE INC. TOP- TOPOLOGIC TOT- TOT LINFORMATION SERVICES INC. ILS- TELELEARNING SYSTEMS THO- THO SOFTWARE INC. TOP- TOPOLOGIC TOT- TOTL SOFTWARE INC. TOP- TOPOLOGIC TOT- TOTL SOFTWARE INC. TOP- TOPOLOGIC TOT- TOTL SOFTWARE INC. TOP- TOPOLOGIC TRA- TRANSTAR TRC- TRACE TRI- TRACE TRC- TRACE TRI- TRACE TIX- TELETEX COMMUNICATION CORP. TWY THE MIZARDS UNL U.H.L. RESEARCH ASSOCIATES INC UMB- UMBRELLA SOFTWARE UNC- UNICON SOFTWARE UNL U.H.L. RESEARCH ASSOCIATES INC UMB- UMBRELLA SOFTWARE VAD- VADEM VAL- VALSALA INC. VCP- VIDEO & COMPUTER PLACE INC. VCP- VIDEO & COMPUTER VID- WADEM WERELA SOFTWARE WILL MAY TO SOFTWARE VID- VIDEOROOK CORPORATION VIL VIDEOROOK CORPORATION V	CITY	STATE	PHONE #
STC- STARTECH INC.	MARINA DEL REY	CA	VS. 1
STE- STEP INDUSTRIES	HOUSTON	TX	/15_400 DEDO
SIG- SUFTWARE TO GO	DAK KIDEE	IN MI	800 821 2424
STP STARPOINT SOFTWARF	FA7FILE	CA	916 435 2386
STR- STRATEGIC SIMULATIONS INC.	MOUNTAIN VIEW	CA	800 227 1617
SUB- SUBLOGIC CORP.	CHAMPAIGN	IL	217 359 8482
SUD SUNDIAL SOFTWARE ASSOCIATES	ROCHESTER	NY	716 654 7107
SUN- SUNCOM INC.	NORTHBROOK	IL	312-291-9780
SUP SUPERIOR BRAPHILS EMPURIUM	MT PROSPECT	II	312-394-5165
SUI- SPECTRA VIDEN INC.	NEW YORK	NY	201 664 8611
SWC- SOFTWARE CONSULTANTS	SALT LAKE CITY	UT	801-566-3901
SWP- SDFTWARE PLUS	CITRUS HEIGHTS	CA	
SYD SYDNEY DEVELOPMENT CORP	AFAVETTE	on	619 231 1775
SYF SYSIEM VII FURNITURE	LAFATEITE	MI	717 272 2950
SYN- SYNAPSE SHETWARE	RICHMOND	CA	415-527-7751
SYS- SYSTEMS MANAGEMENT ASSOCIATES	RALEIGH	NC	919-787-7703
T&F- T&F SOFTWARE COMPANY	NORTH HOLLYWOOD	CA	213-501-5845
T&M T&M PRODUCTS	DE SOTO	TX	10/ 00/ 150/
IAM- TAMAKACK SOFTWARE	DAKRA	NV	406 821 4596
TAY- TAYLORMANE CHETHARE	I INCUI N	NF.	402-464-9051
TCN- THE COMPUTER NETWORK	FOUNTAIN VALLEY	CA	714 855 4366
TEA- TEACHING TOOLS	PALO ALTO	CA	
TEL- TELEGAMES SOFTWARE	HAMPTON	ON CANADA	416 263 8064
TEX- TEXAS TECHNICAL SERVICES INC.	HOUSTON	ŢX	713-965-9977
TEP TE/PRODUCTS	PLANU	I X	214 424 8568
TIC- TOTAL INFORMATION SERVICES INC	I OS AL AMOS	NM	
TLS- TELELEARNING SYSTEMS	SAN FRANCISCO	CA	800 225 3276
TMG- TMG SOFTWARE INC.	BUFFALO GROVE	IL	
THW- TIMEWORKS INC.	DEERFIELD	IL	800-323-9755
TOP- TOPOLOGIC	BURLINGTON	IA	319-754-5291
TOT- TOTL SOFTWARE INC.	WALNUI CREEK	CA	415-945-78//
TPUL TORONTO PET HEERS FROMP	TORONTO	UN LONDID	017 /43 0474
TRA- TRANSTAR	BELLEVUE	WA	206-454-9250
TRC- TRACE	MOUNTAIN VIEW	CA	800-24TRACE
TRI- TRIMICRO	ORANGE	CA	714 771 4038
TRN- TRANSIERRA TECHNOLOGY	MADERA	CA	217 215 4520
IKU- IKUNIX	UNDERWOOD	LH ND	213 213 0329
TGI TRII ORVIE GERUICES INC	PORTI AND	OR OR	
TIX- TELETEX COMMUNICATION CORP.	FOSTER CITY	CA	415 341 1300
TWZ THE WIZARDS	THE WOODLANDS	TX	
UHL U.H.L. RESEARCH ASSOCIATES INC	LONG BEACH	CA	213 493 1955
UMB- UMBRELLA SOFTWARE INC.	BRAMALEA	UN CANADA	714-504-1751
INC- INICORN SOFTMORE INDUSTRIES	THRUMA LAS VESAS	NU	702 798 2727
UNI- UNITRONICS	DAKLAND	CA	415 536 6655
USE USEFUL SOFTWARE	SCARSDALE	NY	
VAD- VADEM	SANTA CLARA	CA	408 738 0571
VAI- VAISALA INC.	WOBURN	MA	800 227 3800 /HAWS
VCP- VIDEO & COMPUTER PLACE INC.	MEDINA	OH	216 722 0770
ACI- AICIOKI ZOLIMAKE	NTI EC	PA TI	213-276-3/8/
VID- VIDEOBOOK CORPORATION	SFATTI F	WA	206 282 3636
VIR- VIRGINIA MICRO SYSTEMS	WOODBRIDGE	VA	703 491 6502
VIS- VISUAL HORIZONS	ROCHESTER PARK	NY	The state of the s
VIV- VIDEO VALUE	ROLLING HILLS ESTATES	CA	800 227 3800/528
VUNT- VILLAGE UPFICE MACHINES	KULLING MEADOWS	IL MT	312-991-0880
ANI- ANICHY	EEDERAL MAY	MV UI	204-030-MAUE
WEB- WEBBER SOFTWARE	SOUTHEASTERN	PA	215 687 5607
WEO WESOFT	MINNEAPOLIS	MN	612 922 5808
WEP WEPCO	BELMONT	CA	800 831 6996
WIC WICO	NILES	IL	
MIT MITAKD MAKE	BOLINGBROOK	IL	E44 074 747
MEN- MILLIAM BUBBING	DKEENLAWN	NY	516 271 3177
XAN XANA DATA SYSTEMS	שאת האראבנ	LH	213 410 9994
ZAX- ZAXIS	SAN CARLOS	CA	415-592-4334
			wie IVVI

MOUTHPIECE

THE COMMUNICATIONS SYSTEM

By David Barron & Michael Kleinert



\$39.95

Upload/Download of Text and Programs

30K Send/Receive Buffer

Full Printer Support

Function Key Macros

On-Screen Status and On-Line Help

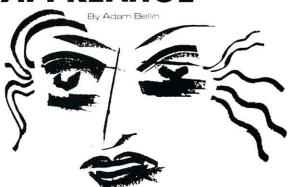
Talk Fast from 110 to 1200 baud

Disk Access with no DOS needed

100% Machine Language

**EVENTHORIZON SOFTWARE** 

# **SORCERER'S APPRENTICE**



### FOR THE ARTIST WITHIN YOU!

16 Color Palette

On Line Help

Automatic Lines

Automatic Area Fill

Rectangles

Microview

Circles

Memory Move

Load/Save Screens and Fonts from Disk

Design Custom Type Fonts and Symbols

Use Screens in your own Basic Programs

DISK ONLY

PLUS \$2.00 SHIPPING

P.O. BOX 1327 NEW YORK, NY 10028 212 535:0697

**EVENTHORIZON SOFTWARE** 

@ 1983 Event Horizon Corporation, All Rights Reserved



# FOR COMMODORE 64®

Packed with Features You'll Like at a Price You'll Love

#### INCLUDES:

- No Glare, Light Gray Background with Black Letters
- Prompt Line in White Letters
- Four Help Screens
- 40 Page Manual with Complete Index
- Multiple Line Spacing
- Delete and Retrieve Characters, Words & Paragraphs
- Global Search/Search and Replace
- Format New Disk from Editor Menu

Circadian )

Tabbing

- \* Modify Margins Anywhere in Text
- Block Save and Move
- Indentation
- Underlining
- \* Page Headings & Numbering
- \* Conditional and Unconditional Paging
- \* Center Text
- \* Supports Printers through User or Serial I/O Ports
- \* List Files on Disk

FOR FASTER SERVICE CALL - (305) 723-5717

P. O. BOX 1208

MELBOURNE, FLORIDA 32902





Commodore 648 is a registered trademark of Commodore Business Machines, Inc.

- Software, Inc.

Let The SMART 64 Terminal
COMMODORE 64* DO THE DRIVING DISTO
No matter which direction you wish to travel in, experience the advantage of computer communications with The SMART 64 Terminal. Discover the program that puts you on the Right Road to: Public-Access Networks, University Systems, Private Company Computers and Financial Services.  The SMART 64 Terminal designed with Quality-Bred features, Affordable Pricing And Service.  So why not travel the communications highways the SMART way!
Accessories included:    Selective Storage of Received   User-Defined Function Keys,   Formatted Lines.   Data.   Screen Colors, Printer and   Review, Rearrange, Print Files.   Alarm Timer.   Modem Setting.   Sends/Receives Programs and Files of ANY SIZE.   Auto-Dial.   Disk Wedge Built-In!   Adjustable transmit/receive tables allow custom requirements. These and other features make The SMART 64 Terminal the best choice for grand touring telecommunications.
*Commodore 64 registered trademark of Commodore Business Machines Inc.  *Supports 80-column cartridge by Dara 20 Corporation.  Dealer Availability Call (203) 389-8383  Dealer Availability Call (203) 389-8383

# GET THE MOST OUT OF YOUR COMMODORE-OR VIC-20 COMPU





# ALSO AVAILABLE:

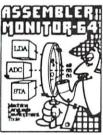
3 outstanding Music Albums to go with Synthy-64 Classical Christmas and Rag/Sing Along See below



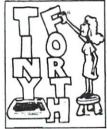












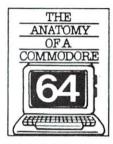




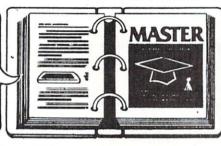












ULTRABASIC-64...Add 50 commands: graphics, music, TURTLE and game features. Tutorial, demo plus. TAPE \$39.95 DISK \$42.95

ASSEMBLER-MONITOR-64 High speed language development. Eleven function monitor. Screen editing of source file. DISK \$32.95

DATAMAT-64...Simple powerful data base management with search, sort, report capability at low price. DISK \$32.95

SYNTHY-64... Sets the standard for all of the rest. Best 64-synthesizer anywhere. Samples and manual. CASSETTE \$29.95 DISK \$32.95. Also available: 3 great companion music albums; Classical, Christmas, and Ragtime Sing-Along. DISK \$12.95 Each.

Menu-driven drawings, floor plans and illustrations etc... Slide program capability. DISK \$32.95

CHECKBOOK MANAGER-64 Simple check account maintainance. Optional screen or printer report and backup. DISK \$22.95

GRAPHICS DESIGNER-64... TINY FORTH-64/20...Ex- SKIER-64...This arcadeciting language-low price. Powerful, extensible, 200 +

word vocabulary TAPE \$24.95 DISK \$27.95

ANATOMY OF A COMMO-DORE-64 Complete guide. Full comment ROMS list, detailed internals, descriptions. 300 PAGE BOOK \$19.95

CHARTPAK-64...Professional qualtiy pie, line and bar charts. Menu driven, interactive, hardcopy.

quality game adds hours of action and excitement to your Commodore-64. TAPE \$14.95 DISK \$17.95

ZOOM PASCAL-64...Produces 6502 machine code for speed. Floating point, Integers, strings File handling. **DISK \$39.95** 

P00L-64/20...Play Fullrack or nine ball using hires graphics. Vic-20 required 8K expander.

TAPE \$14.95 DISK \$17.95

SUPER DISK UTILITY-64. Speed copy 4 ways: Total, Bam, Append or File. Dump or modify sectors. More. DISK \$22.95

SCREEN GRAPHICS-64Adds 24 hires, multicolor, sprite commands to 64-BASIC.

Demo, tutorial and manual. TAPE \$24.95 DISK \$27.95

MASTER-64...Full ISAM file management; powerful screen management; excellent printer generator; programmer's aid; BASIC 4.0 commands; machine language monitor; Software developers: NO RUNTIME ROYALTIES; With 150 page manual in three-ring binder and development software

\* DEALER INQUIRIES INVITED SOFTWARE ON DISK \$84.95

# FREE CATALOG Ask for a listing of other Abacus Software for Commodore-64 or Vic-20

Canada East:

DISTRIBUTORS

Great Britain: ADAMSOFT 18 Norwich Ave Rochdale, Lancs.

West Germany: DATA BECKER Merowingerstr 30 PO 516 4000 Dusseldorf 34300 Almhult 4000 Dusseldorf 0211/312085

Great Britain

CCI Software 167 Great Portland St. London WI

Sweden: TIAL TRADING

01-636-6354

Australia: CW ELECTRONICS 416 Logan Road Brisbane, Queens 476-12304 07-397-0808

Canada West:

KING MICROWARE LTD. L.S.I. Distributors Ltd. 5950 Cote des Neiges Montreal, Quebec H3S 126 Vancouver, BC V5Z 4C9 514/737-9335 604/733-0211

New Zealand:

VISCOUNT ELECTRONICS 306-308 Church Street Palmerston North 63-86-696

# AVAILABLE AT COMPUTER STORES, OR WRITE:

P.O. BOX 7211 GRAND RAPIDS, MICH. 49510

For postage & handling, add \$1.50 (U.S. and Canada), add \$3.00 for foreign. Make payment in U.S. dollars by check, money order or charge card. (Michigan Residents add 4% sales tax).



FOR QUICK SERVICE PHONE 616-241-5510





# **COMPUTER INTERFACES**

RS - 232

# ANALOG AND DIGITAL INPUT/OUTPUT MODULES

The BUSSter line of analog and digital products was designed to collect data and to output signals to laboratory and industrial equipment in conjunction with a microcomputer system. These powerful self-contained modules reduce a computer's workload by providing read or write operations to external devices. They are controlled as slave interfaces to real-world physical applications. Control is over an IEEE-488 (GPIB) bus or RS-232 port.



BUSSter modules are available in several digital and analog configurations. The internal buffer and timer provide flexibility by allowing the BUSSter to collect data while the host computer is busy with other tasks.

BUSSter A64—64 channel digital input module to read 64 digital signals. Built-in buffer \$495.00

BUSSter B64—64 channel digital output module to send 64 digital signals \$495.00

BUSSter C64—64 channel digital input/output module to read 32 and write 32 digital signals. Built-in buffer \$495.00

BUSSter D16—16 channel analog input module to read up to 16 analog signals with 8 bit resolution (1/4%) Built-in buffer \$495.00

BUSSter D32—32 channel version of the D16 \$595.00

BUSSter E4—4 channel analog output module to send 4 analog signals with 12 bit resolution (.06%) \$495.00

BUSSter E8—8 channel version of the E4 \$595.00

BUSSter E16—16 channel version of the E4 \$695.00

Add the suffix -G for IEEE-488 (GPIB) or -R for RS-232.

All prices are USA only. Prices and specifications subject to change without notice.

30 DAY TRIAL-

Purchase a BUSSter product, use it, and if you are not completely satisfied, return it within 30 days and receive a full refund.

US Dollars Quoted \$10.00 Shipping & Handling MASTERCARD/VISA



Connecticut microComputer, Inc. INSTRUMENT DIVISION

36 Del Mar Drive Brookfield, Ct. 06804 (203) 775-4595 TWX: 710-456-0052

# **SUPERTAX**

# Get Supertax now and relax on April 15th . . .

## SECOND SUCCESSFUL YEAR! • THOUSANDS ALREADY IN USE!

Use SUPERTAX personal income tax programs to calculate your tax liability now and have plenty of time to make year-end investment decisions to improve your position. SUPERTAX was specifically created for Commodore 64 users by a practicing CPA with a Master's degree in tax accounting. Highly acclaimed by tax pros, SUPERTAX is easy to understand and a pleasure to work with.

- SUPERTAX PROGRAMS are fully screenprompted and include a manual loaded with valuable tax information and guidance.
- SUPERTAX instantly recalculates your entire return when you change any item.
- SUPERTAX is available on cassette and diskette.
- SUPERTAX DATA can be stored on cassette and diskette.
- SUPERTAX is available at 50% off to prior purchasers for all subsequent year's programs.
- SUPERTAX is an essential addition to your personal software library—best of all it's tax deductible.

#### SUPERTAX I

Using either screen or printer output, SUPERTAX I generates clear and concise summaries of Page 1 and 3 and Schedule A of FORM 1040 allowing you to see at a glance and to quickly comprehend your tax situation. This program also prints an OVERALL SUMMARY of the return showing Adjusted Gross Income, Itemized Deductions, Taxable Income, Regular Tax, Income Averaging Tax, Minimum Tax and Payment Due or Refund—all of which are calculated by the program. SUPERTAX I also calculates the moving expense deduction, investment credit, taxable capital gains, political and child care credits, medical limitations, and much more. Input is fast and easy and changes can be made in seconds. This program actually makes tax planning a breeze.

Cassette or Diskette \$79

#### SUPERTAX II

Includes the efficient SUPERTAX I program as well as the more detailed SUPERTAX II program which makes all of the SUPERTAX II calculations, but which also PRINTS THE INCOME TAX RETURN. This program prints page 1, page 2, Schedules A, B, and G (income averaging) of the FORM 1040 as well as FORM 3468 (investment tax credit) on standard government forms or on blank computer paper for use with transparencies. Any input item can be changed in seconds and the entire return is recalculated almost instantly.

Diskette only \$89

NOTE: Printing on government forms requires friction feed printer.

**TO ORDER** Call Toll Free 1-800-527-4171 In Texas Call 214-739-1100 MasterCard, VISA, Money Orders, Bank Checks and COD Orders Accepted (add 3% surcharge for credit card processing) (add \$5.00 for COD)

### SUPERTAX III

This package includes both the SUPERTAX I and SUPER-TAX II programs PLUS a program to calculate and print Schedule C of the FORM 1040. Also included is a stand alone depreciation program which calculates and prints your depreciation schedule using both the old rules and the new ACRS rules. Output from the depreciation program is designed to serve as a supplement to IRS FORM 4562.

Diskette only \$99

Products shipped FOB Dallas, TX Commodore 64 is a trademark of Commodore Business Machines

For Free Brochure WRITE **Rockware Data Corporation** 10525 Barrywood Drive Dallas, Texas 75230

# NEW!



# **IFR**

(FLIGHT SIMULATOR)

CARTRIDGE FOR THE VIC 20 \$39.95

> COMMODORE 64 DISK OR TAPE

> > \$29.95

JOYSTICK REQUIRED

Put yourself in the pilot's seat! A very challenging realistic simulation of instrument flying in a light plane. Take off, navigate over difficult terrain, and land at one of the 4 airports. Artificial horizon, ILS, and other working instruments on screen. Full aircraft features. Realistic aircraft performance — stalls/spins, etc. Transport yourself to a real-time adventure in the sky. Flight tested by professional pilots and judged "terrific"!

An IFR (Flight Simulator) customer writes . . .

"Excellent program . . . will be used regularly I am sure for almost everyone I know is a pilot — including myself. I fly 747's to Hong Kong and Stockholm and dozens of cities between each month, as do all my buddies . . . I will strongly recommend it to my peers."

# Still the Best!

TYPING TUTOR

WORD INVADERS

Rated THE BEST educational program for the VIC 20<sup>TM</sup> by Creative Computing magazine.

Commodore 64 version: "This is the best typing tutor we have seen yet; it can get your children touch typing in short order and bring an old hand up to speed. Includes excellent training modules and an arcade type mode to liven things up and put some pressure on; \* \* \* \* \* \* "INFO-64 Our customers continue to tell

us of their success....
".. delighted with my son's progress...he is the only one in his second grade class who touch types at the computer."

(58 year old man writes) . . . "great, excellent. To me a source of great learning . . . I just can't express how much I have enjoyed it!"

In daily use by schools across the USA.

"Computer aided instruction at its best" Commander magazine

# TYPING TUTOR + WORD INVADERS

The proven way to learn touch typing.

COMMODORE 64 Tape \$21.95

COMMODORE 64 Disk \$24.95

VIC 20 (unexpanded) Tape \$21.95

# **MORE NEW PROGRAMS**

### VIDEO VAN GOGH

by Peter Kazlouski

Use your joystick to create incredibly detailed hires multicolor drawings and then save them to disk. View drawings again later or use them in your own programs.

Commodore 64 (disk only) \$21.95

### THINK TWICE

by James E. Slater

2 educational programs on one tape. MEMORY FUN is a game of concentration in which 1 to 4 players test their memory by matching pairs of pictures, words, designs, or musical tones. Great fun! FLASHCARD lets the user make his own study material easier to learn. 50 States and Capitals sample quiz included.

Commodore 64 (tape only) \$16.95

### SPRITE DESIGNER

by Dr. Lee T. Hill

Create sprites easily and then transform them automatically for views from different perspectives or for animated effects. Options include: copy any previous sprite, reflection, rotation, translation, shearing, reverse image, merge & intersect. Saves sprite data for merge into your own program.

Commodore 64 (tape) \$16.95 (disk) \$21.95

# Shakespeare Writer

by James W. Sullivan

Old English typestyle print and simple word processor package. With this program and a VIC-1525 printer (or other graphic printer and a VIC-1525 graphic emulating interface) you can automatically print in Old English typeface. Great for party invitations, announcements, advertisements, and other attention getting notices. The heading above was printed on a VIC-1525 printer (original copy reproduced half-size in this ad). Use also as a simple word processor for letters, short reports, etc. in normal, double width or Old English typeface.

Commodore 64 (tape) \$16.95 (disk) \$21.95



Shipping and handling \$1.00 per order. CA residents add 6% tax.





P.O. Box 6277, San Rafael, CA 94903 (415) 499-0850

Programmers: Write to our New Program Manager concerning any exceptional VIC 20TM or Commodore 64TM game or other program you have developed.

### 

WITH THE SPEED AT WHICH PRODUCTS FOR THE 64 ARE BEING INTRODUCED, WE WOULD BE LIMITING OURSELVES TOO MUCH TO ANNOUNCE PROJECTS FOR THE SPRING ISSUE (MARCH '84) AT THIS TIME. WE CAN SAY THAT INFO-64 WILL CONTINUE TO LOOK FOR AND SHARE WITH OUR READERS THE BRIGHTEST AND THE BEST IN PRODUCTS FOR THE 64.

SOME OF THE PRODUCTS WHICH WE HOPE TO INVESTIGATE BY NEXT ISSUE INCLUDE: THE APPLE ENULATOR FROM PIONEER SOFTWARE, MOSAIC'S ACCESS-64 RAM EXPANSION, THE EXECUTIVE 64 PORTABLE (IF WE CAN EVER GET OUR HANDS ON ONE), THE MIND CONTROL DEVICE FROM BEHAVIORAL ENGINEERING, APPLICATIONS GENERATORS ("THE LAST ONE" OR "CODEWRITER"), AND THE POWERPAD FROM CHALKBOARD.

IF YOU HAVE PRODUCTS IN MIND THAT YOU WOULD LIKE TO SEE REVIEWED (EITHER SPECIFIC OR GENERAL TYPES), DROP US A CARD AND LET US KNOW- WE WANT TO HEAR FROM READERS AND WILL LISTEN, & RESPOND TO YOUR REQUESTS.

> INFO-64 (READER MAIL) PO BOX 958 AUBURN, WA 98071

WE WISH TO THANK ALL OF YOU WHO HAVE SENT VALUABLE SUGGESTIONS AND GREATLY APPRECIATED ENCOURAGEMENT. WE WELCOME ALL CORRESPONCENCE, AND READ EVEY LETTER

WE ARE ALSO INTERESTED IN PUBLISHING A CERTAIN AMOUNT OF READER-SUPPLIED ORIGINAL PROGRAMS (NO MORE THAN 2 PAGES), ARTICLES, ANECDOTES, CARTOONS, GRAPHICS CREATIONS, POETRY, ETC. IF YOU ARE INTERESTED, AND HAVE SOMETHING INTERESTING, SEND US YOUR IDEA TO THE BOX ABOVE. THE PAY ISN'T STAGGERING, BUT YOUR NAME COULD BE IN PRINT!

REGARDS, UNTIL NEXT MONTH-

ADVERTISERS

BENN DUNNINGTON -EDITOR



# ABACUS SOFTWARE..... ACADEMY SOFTWARE.....69 CIRCADIAN SOFTWARE, INC......66 CONNECTICUT MICROCOMPUTER, INC.....68 H&H ENTERPRISES......70 INFO-64......39 MICRO-WARE DISTRIBUTING INC.....4 MICROTECHNIC SOLUTIONS......66 PROFESSIONAL MICRO SERVICES................70 ROCKWARE DATA CORPORATION......68 SOPHISTICATED SOFTWARE OF AMERICA....29

THE SOFTWARE CONNECTION......68

# **HUGE SELECTION**

Software & Accessories Upgrades & Repairs

# COMMODORE 64

Send or Call for

# FREE CATALOG

Dept. I

# PROFESSIONAL MICRO SERVICES

100 W. 22nd St. Baltimore, MD 21218 (301) 366-0010

# DISK UTILITIES FOR COMMODORE COMPUTERS

\*\*DISK SUPPORT (\$14.95 postage paid)\*\*

This program, written for the VIC-20 and COMMODORE 64, provides a 1K machine language extension which adds twelve new commands to your computer's operating system. Not to be confused with the combersome "wedge", DISK SUPPORT offers 12 separate, easy to use, two-keystroke commands which WORK! You can SAVE with automatic VERIFY, SAVE-WITH-REPLACE (eliminating Commodore's DOS bug), LOAD, VERIFY, DELETE, and RENAME disk files with just two keystrokes, Also provided are commands which INITIALIZE, FORMAT and VALIDATE a diskette, EXECUTE any program on the diskette, print the ERROR message to the screen, and list the diskette's directory to the screen (formatted for your computer's display) without affecting the contents of the computer's memory; all with only two keystrokes. DISK SUPPORT is compatible with all memory expansion cartridges, the SUPER EXPANDER and PROGRAMMERS' AID cartridges, and Micro Systems Development's VIE-20 and CIE-64 IEEE interface cartridges. DISK SUPPORT is designed to work equally well with both single and dual disk drives and is a MUST for all disk drive users!

\*\*\*DISK DUPLICATOR (\$14.95 postage paid)\*\*\*

DISK DUPLICATOR (\$14.95 postage paid)\*\*\*

DISK DUPLICATOR is a machine language program which provides you (the owner of a 1540, 1541 or 2031 single disk drive) a fast and convenient way to make back-up copies of your precious, irreplaceable diskettes. DISK DUPLICATOR is 100% MACHINE LANGUAGE, 100% FAST, and most importantly, 100% AFFORDABLE! Diskettes are copies or batim with as few as 4 exchanges (using a COMMODORE 64). Don't let an accident or a mistake catch you without back-up copies of all your diskettes. ORDER "DISK DUPLICATOR" TODAY!

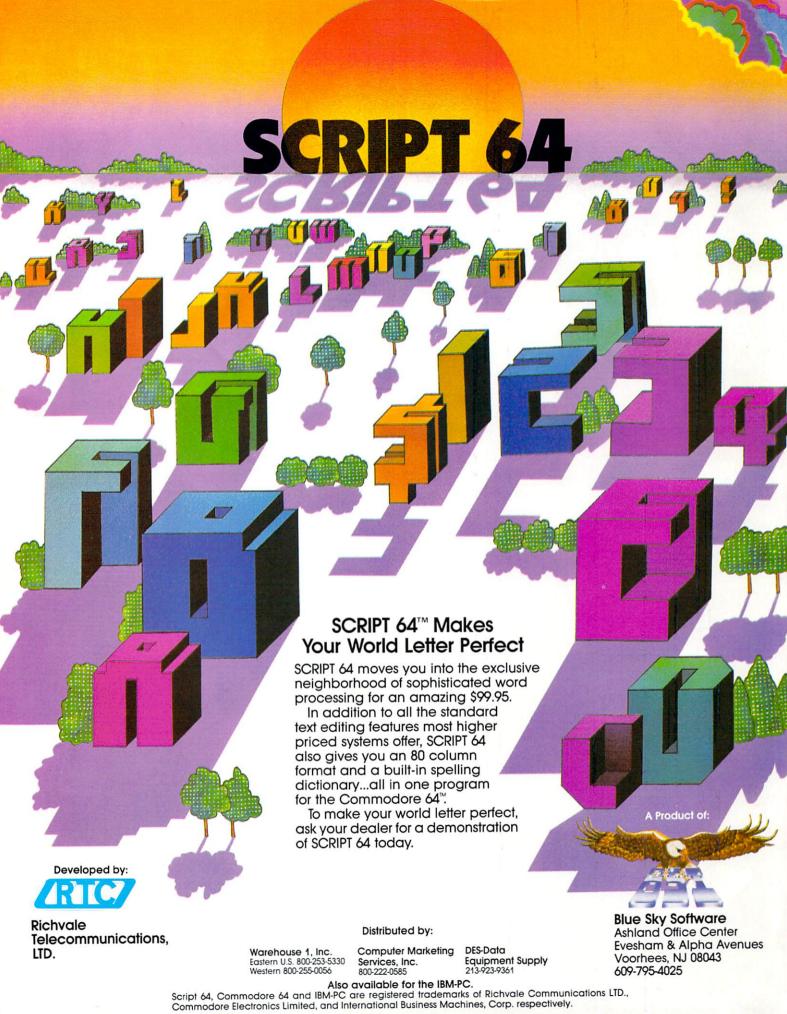
\*\*\*DISK RETRIEVER (\$9.95 postage paid)\*\*\*
If you have ever accidentally "SCRATCHED" a program or a data file from one of your diskettes and wished there were only some way to recover that precious file, DISK RETRIEVER is the program you've been waiting for! DISK RETRIEVER is a 100% machine language program that will "UNSCRATCH" all of your disk files and restore them to their original status. Let DISK RETRIEVER turn back the clock and help you recover your "lost" programs and files!

\*\*\* SPECIAL \*\*\*

Order all three programs at one time and SAVE \$5.00! If you order the three disk utility programs, you need only send a check or money order for \$34.95. We will pay postage and

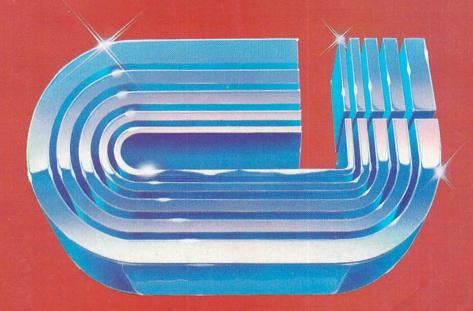
## **H&H ENTERPRISES**

5056 North 41st Street, Milwaukee, WI 53209



Circle No. 157

# The ULTIMATE Printer Interface?



We hope so, but because we have 2-1/2 technicians answering four incoming customer service phone lines, we have learned that just when you think the product is perfect some programmer finds a new way to do things and proves you wrong! When we at CARDCO, Inc. are told of a problem, we try to incorporate the cure in all future production. And as our customers will attest, we do not leave owners of older versions out in the cold. When an upgrade is made in the production version of our interface, we make the upgrade available to all owners of that interface, AT NO CHARGE! Free technical support, no charge product upgrades and a lifetime guarantee, we dare anyone to do a better job of customer sup-

That's all very nice, but what's all this about the ULTIMATE printer interface? While answering your technical questions our customer service technicians listened to what you wanted. You wanted to be able to print the full Commodore character set with Commodore graphics, reversed characters and reversed graphics. You wanted compatability with Commodore's normal tab functions and high resolution dot space tab functions. You wanted to be able to use the



Commodore high resolution dot addressable araphics commands. And you wanted to run all existing programs without modification and without giving up the extra features and special functions of your printer.

The CARD/?+G has DIP switch selection for the following fine printers:

- Prowriter
- C-Itoh 8510
- NEC 8023
- Epson MX-80/100
- Epson RX-80/100
- Epson FX-80/100
- Star Gemini 10X
- · Okidata 82/83/84
- · Okidata 92/94
- · Axiom GP/100
- · Gorilla Banana

In response to your demand CARDCO, Inc. proudly presents the CARD/?+G (CARDPRINT+G). Why is it the ULTIMATE printer interface? Because it is "state of the art" today and because of our strong committment to customer service it will stay that way for all your tomorrows.

The CARD/?+G is available now from your local retailer. Suggested retail \$89.95.

If you own a version of the original CARD/?A, we are sorry the CARD/?+G is a totally new product and you will not be allowed a free upgrade. But if you want the capabilities of the new CARD/?+G'we do have a trade up policy, please contact our customer service department for details.

If you don't need the graphics capabilities of the CARD/?+G be sure to check out the new CARD/?B. The "B" model offers all of the same features that have made the CARD/? A the #1 selling printer interface in an economy package. The CARD/?B is compatible with programs not requiring graphics functions (ie. Word Processors, Spread Sheets, etc.) and fully supported by our customer service department and the suggested retail price is only \$49.95

313 Mathewson • Wichita, Kansas 67214 • (316) 267-6525

